BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

In the Matter of:	)	
	)	
SIERRA CLUB, ENVIRONMENTAL LAW AND POLICY CENTER, PRAIRIE RIVERS NETWORK, and CITIZENS AGAINST RUINING THE ENVIRONMENT	)	
	)	**PCB 2013-015**
Complainants,	)	**(Enforcement – Water)**
	)	
v.	)	
	)	
MIDWEST GENERATION, LLC,	)	
	)	
Respondent.	)	

NOTICE OF FILING

TO: Don Brown, Assistant Clerk
Illinois Pollution Control Board
James R. Thompson Center
100 West Randolph Street, Suite 11-500
Chicago, IL 60601

Attached Service List

PLEASE TAKE NOTICE that I have filed today with the Illinois Pollution Control Board Respondent, Midwest Generation, LLC's Motion for Sanctions, a copy of which is hereby served upon you.

MIDWEST GENERATION, LLC

By: /s/ Jennifer T. Nijman

Dated: March 20, 2018

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CERTIFICATE OF SERVICE

The undersigned, an attorney, certifies that a true copy of the foregoing Notice of Filing, Certificate of Service and Respondent, Midwest Generation, LLC's Motion for Sanctions was filed electronically on March 20, 2018 with the following:

Don Brown, Assistant Clerk
Illinois Pollution Control Board
James R. Thompson Center
100 West Randolph Street, Suite 11-500
Chicago, IL 60601

and that true copies were emailed on March 20, 2018 to the parties listed on the foregoing Service List.

/s/ Jennifer T. Nijman

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MIDWEST GENERATION, LLC'S MOTION FOR SANCTIONS

Respondent, Midwest Generation, LLC ("MWG"), by its undersigned counsel, submits this Motion for Sanctions to the Illinois Pollution Control Board ("Board"), pursuant to Rule 35 Ill. Adm. Code 101.800. Sanctions are proper because Complainants blatantly disregarded the Hearing Officer's Order and Board Rules by filing a post-hearing Motion to Strike Portion of MWG Expert's Report and Testimony ("Complainants' Motion" or "Motion to Strike") without preserving the issue during the hearing or raising any timely objections. In support of its Motion, MWG submits its Memorandum in Support and states as follows:

1) On October 23 through October 27, 2017 and continuing on January 29 through February 2, 2018, a hearing was held in the above captioned matter.

2) On February 1 and 2, 2018, MWG's expert, John Seymour, presented testimony concerning whether the ash ponds at the MWG Stations and the alleged historic ash areas were an ongoing source of the alleged groundwater contamination.

3) Mr. Seymour's testimony was based on his expert reports, submitted to Complainants on November 2, 2015, supplemented on February 29, 2016, and updated in a detailed PowerPoint presented at the hearing. (Exhibits 901, 903, 904 and 906).

4) Almost two years prior to the hearing, Complainants conducted a four hour deposition of Mr. Seymour. During the deposition, Complainants asked Mr. Seymour about the methodology Mr. Seymour used to compare constituents in MWG ash leachate with constituents found in the groundwater (the "constituent comparison"). Complainants' questions at the deposition were essentially the same as the questions they asked of him at the hearing. Prior to the hearing, Complainants never filed an objection or motion *in limine* regarding Mr. Seymour's opinions or conclusions.[1]

5) During the hearing, Complainants did not object to any of Mr. Seymour's opinions. PCB 13-15 Hearing Transcript, Feb. 1 and 2, 2018.

6) At the end of Mr. Seymour's direct testimony, MWG moved to enter Mr. Seymour's expert report as Exhibit 903, the supplement to Mr. Seymour's report as Exhibit 904, and the updates to Mr. Seymour's report as part of the expert hearing presentation as Exhibit 901. PCB13-15 Hearing Transcript, Feb. 2, 2018, p. 128:7-9.

7) Complainants stated they had "No objection" to the admission of all of the exhibits. PCB 13-15 Hearing Transcript, Feb. 2, 2018, p. 128:18.

8) On February 2, 2018, Hearing Officer held that "Respondent Exhibits 900, 901, 902, 903, 904, 905, 906, 907, and 908 [were] admitted." PCB 13-15 Hearing Transcript, Feb. 2, 2018, p. 128:21-23.

[1] Pursuant to the Hearing Officer's Order dated April 11, 2017, all motions *in limine* were to be filed by May 22, 2017.

9) On February 26, 2018, Complainants filed their Motion to Strike concerning Mr. Seymour's constituent comparison – the very same issue that was the subject of Complainants' questions during Mr. Seymour's deposition.

10) On February 28, 2018, MWG notified Complainants that their Motion was untimely because they had waived any rights to challenge evidence already admitted, and requested that they withdraw the motion. On March 7, 2018, Complainants declined to withdraw their Motion.

11) Despite the improper nature of Complainants' Motion to Strike, MWG was required to expend the time and effort to prepare a detailed Response ("MWG's Response") filed on March 20, 2018. A copy of MWG's Response is attached to this Motion for Sanctions as Attachment A.

12) Complainants' Motion is a clear violation of both the Board Rules and the Hearing Officer's Order admitting Mr. Seymour's testimony, reports, and documents without objection. It is well settled that a failure to object at the original proceeding or move to strike as soon as it is practicable constitutes a waiver of the right to raise an issue on appeal. *Peoria Disposal Co. v. Peoria County Board*, PCB 06-184, 2007 Ill. ENV LEXIS 250, *58 (June 21, 2007), *citing E & E Hauling, Inc. v. Pollution Control Bd.*, 107 Ill. 2d 33, 38, 89 Ill. Dec. 821, 823, 481 N.E.2d 664, 666 (1985); *People v. Koch*, 248 Ill. App. 3d 584, 593-94, 188 Ill. Dec. 77, 83, 618 N.E.2d 647, 653 (1st Dist. 1993).

13) Even if the Board could overlook Complainants' failure to raise <u>any</u> objections at the hearing (or before), Complainants violate the Board Rules by calling their motion a "Motion to Strike", when it is simply an improper appeal of the Hearing Officer's order to admit the evidence.

14) If the Board even gets to the substance of Complainants' Motion, the Board will find that Complainants do not properly apply the applicable law. Complainants ignore the Board's more liberal rules for accepting evidence, and rely on Rule 702 of the Illinois Rules of Evidence. Yet Complainants' discussion of Rule 702 is substantively inadequate because it fails to address the

first step (whether an opinion is new or novel) in the two-part analysis for admission of expert reports.

15) Sanctions are appropriate where a party asserts a proposition contrary to established precedent. *Gambino v. Blvd. Mortg. Corp.*, 398 Ill. App. 21, 73 (1st Dist. 2009). Sanctions are also appropriate where a party fails to address controlling law. *McClaughry v. Village of Antioch*, 296 Ill. App. 3d 636, 645-646 (2nd Dist. 1998). Additionally, sanctions are appropriate where a Hearing Officer's Order, Board Order, or the Board Rules are violated. *Citizens Against Regional Landfill v. The County Board of Whiteside County and Waste Management of Illinois, Inc.*, PCB 92-156, 1993 Ill. ENV. LEXIS 75 (Jan. 21, 1993) *slip op* *15 (Board granted sanctions because the Complainant failed to follow the hearing officer's order).

16) As noted by the Hearing Officer, throughout the hearing, Complainants had a pattern and practice of confusion and disorganization related to exhibits and basic evidentiary rules. This disorganization caused repeated and unnecessary delays in the hearing and thus substantial increased costs to MWG. *See* Oct. 23, 2017 Hearing Transcript, pp. 184:22 – 185:3, Oct. 24, 2017 Hearing Transcript pp. 226:16-227:3, Oct. 25, 2017 Hearing Transcript, pp. 168:11- 169:2, and Jan. 31, 2018 Hearing Transcript, p. 203:5-10).

17) Complainant Sierra Club has a public "campaign" to shut down coal by forcing energy companies to spend money responding to frivolous issues. *See* Grunwald, Michael. "Inside the War on Coal." *Politico*, May 26, 2015, https://www.politico.com/agenda/story/2015/05/inside-war-on-coal-000002, attached as Attachment B. Additionally, at the hearing, MWG introduced Exhibit 662, Sierra Club's 2014 Team IL-Beyond Coal Campaign Plan, that details Sierra Club's specific campaign to shut down all of MWG's fleet. [2]

[2] MWG will be filing an appeal of the Hearing Officer's Rule to exclude Exhibit 662 and strike the related testimony on March 21, 2018 pursuant to the March 8, 2018 Hearing Officer's Order. The Hearing Officer's decision was

18) Here, Complainants violated the Board Rules by failing to appeal an order by the Hearing Officer. Instead, Complainants moved to strike the expert reports and testimony long after they had the right to do so. In their motion, Complainants fail to even mention the issue of waiver due to their failure to object, and fail to fully address the controlling law under Rule 702 of the Illinois Rules of Evidence. Complainants' pattern of disorganization was so prevalent and consistent that it must be interpreted as an intentional violation of the rules regarding advocacy. *Citizens Against Regional Landfill v. The County Board of Whiteside County and Waste Management of Illinois, Inc.*, 1993 Ill. ENV. LEXIS 75, *slip op* 12-13. Complainants' actions in this matter demonstrate their campaign to shut down the MWG Stations.

19) Pursuant to Section 101.800(a) of the Board's rules, the Board may order sanctions if a person unreasonably fails to comply with any provision of 35 Ill. Adm. Code 101 through 130 or any Board or hearing officer order. 35 Ill. Adm. Code 101.800(a).

20) Because of Complainants' pattern of conduct and because Complainants violated the Board Rules, failed to preserve their objections, and failed to even mention the issue of their waiver of the right to raise an issue on appeal, the Board should sanction Complainants for bringing their frivolous Motion to Strike.

21) MWG brought the issue of waiver to Complainants' attention and Complainants refused to withdraw their Motion, forcing MWG to expend additional costs to respond. Pursuant to Section 101.800(b), MWG requests that the Board sanction Complainants by:

a. Barring the Complainants from making any of the arguments made in their Motion to Strike in any of Complainants' future briefs or motions in this matter,
b. Overrule the Hearing Officer's decision to deny admission of Exhibit 662, and
c. Such additional relief as the Board deems appropriate.

based on relevancy, and Complainants' Motion to Strike evidences how relevant Exhibit 622 is to Complainants' actions.

WHEREFORE, for the reasons stated above, MWG requests that the Board grant MWG's motion for sanctions and issue an order with the aforementioned relief.

Respectfully submitted,
Midwest Generation, LLC

By: /s/ Jennifer T. Nijman
One of Its Attorneys

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	)	**PCB 2013-015**
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MIDWEST GENERATION, LLC,	)	
	)	
Respondent.	)	

MEMORANDUM IN SUPPORT OF MIDWEST GENERATION'S MOTION FOR SANCTIONS

Midwest Generation, LLC ("MWG") requests that the Illinois Pollution Control Board ("Board") enter an order for sanctions barring Complainants from repeating any of the arguments or claims in their Motion to Strike Portions of Respondent Expert's Reports and Testimony ("Complainants' Motion" or "Motion to Strike"), and overrule the Hearing Officer's decision to exclude Exhibit 662. Complainants blatantly disregarded the Board's Rules and the Hearing Officer's Order by filing their post-hearing Motion to Strike without preserving the issues during the hearing or raising *any* timely objections. In support of its Motion for Sanctions, MWG states as follows:

A. Brief Statement of Facts

On October 23 through October 27, 2017 and continuing on January 29 through February 2, 2018, a hearing was held in the above captioned matter. Throughout the ten days of hearing, Complainants caused numerous delays due to confusion created by them regarding exhibits and

failure to follow applicable rules of evidence. Both on and off the record, the Hearing Officer noted Complainants' delays and disorganization. On multiple occasions, the Hearing Officer remarked that the Complainants had about a year to prepare, and he was frustrated by the disorganization and resulting delay and confusion. *See* PCB13-15 Hearing Transcripts, Oct. 23, 2017, pp. 184:22 – 185:3, Oct. 24, 2017, pp. 226:16-227:3, Oct. 25, 2017, pp. 168:11- 169:2, and Jan. 31, 2018, p. 203:5-10. Complainants' stated estimates of a five day hearing turned into a ten day hearing at considerable cost and expense.

On the final two days of hearing, MWG's Expert Witness, Mr. John Seymour, testified about his opinions regarding the issues in the lawsuit, including his opinions as to whether the groundwater under the MWG stations contained constituents from the MWG coal ash. PCB13-15 Hearing Transcripts, Feb. 1 and 2, 2018. As the basis for one of Mr. Seymour's opinions, Mr. Seymour compared the constituents found in leachate from the MWG coal ash ponds to the constituents found in the groundwater (the "constituent comparison"). *See* PCB13-15 Hearing Transcript, Feb. 1, 2018, Feb. 1, 2018, pp. 281:4 – 284:4, Feb. 2, 2018, pp. 14:6 – 20:17, 69:4 – 70:9, 92:11-93:2, 118:18 – 119:18. Mr. Seymour first presented his constituent comparison opinion in his expert report submitted to Complainants on November 2, 2015 (MWG Exhibit 903, Sections 5.5.1 – 5.5.2) and supplemented on February 29, 2016 (MWG Exhibit 904). Long before the hearing, on March 1, 2016, Complainants conducted a four hour deposition of Mr. Seymour. During the deposition, Complainants specifically asked Mr. Seymour virtually identical questions as Complainants asked of him at the hearing about the constituent comparison opinion. Complainants asked Mr. Seymour about his methodology for the constituent comparison, the detection limits of the constituents, and even asked Mr. Seymour to compare the table in his report to a groundwater monitoring report. *See* MWG Response at Attachment A, Sec. II, and Exhibit 1 to Attachment A, excerpt of John Seymour Deposition, March 1, 2016. For example, during the

deposition, Complainants compared groundwater data from a groundwater monitoring report to Mr. Seymour's table and specifically asked about the detection levels of antimony at Waukegan during the deposition:

> Q: Let's consider antimony, just as another point of comparison. If we look at Table 5-4 of your report –
>
> A For Waukegan?
>
> Q For Waukegan also.
>
> A Okay.
>
> * * *
>
> Q So here we show in Table 5-4 of your report -- we show antimony as being in that leachate, correct? Because it was only an indicator if it was in it --
>
> A Yes.
>
> Q -- is that right? But it's not present in the groundwater samples for any of the wells; is that correct?
>
> A Yes.
>
> Q: Let's see how much antimony was detected in the leachate data. So if we can look at 5-2, Table 5-2, page 1 of that table.
>
> * * *
>
> Q: So is it correct that the concentrations of antimony in leachate for sub-bituminous coal range between .00024 and .00062 milligrams per liter?
>
> A: In the impoundment for sub-bituminous coal, antimony was found at those levels in parts per million.
>
> Q: Okay. So that is less than .001 milligrams per liter, correct?
>
> A: Yes.
>
> Q: Now, let's compare how much antimony was detected in the groundwater. If you would look back at the same monitoring data, page 56445 [*of the "Annual and Quarterly Groundwater Monitoring Results - Fourth Quarter, 2015," identified as Ex. 9 in the deposition*]
>
> A: I've got it.
>
> Q: -- from Monitoring Well 2. We have a non-detect, right, for antimony for each of those dates in 2014?
>
> A: Yes.
>
> Q: And the detection level of that is .0030, correct?
>
> A: Yes.

> Q: So with the concentrations of antimony that were found in the EPRI leachate data, up to .00062 milligrams per liter, would that amount of antimony be detectible in groundwater using this detection limit?
>
> A: It does not look like it would be.
>
> (MWG Response at Attachment A, Sec. II, and Exhibit 1 to Attachment A, Seymour Dep., pp. 134:19 – 139:24)

Despite being fully aware of Mr. Seymour's constituent comparison opinion and asking him numerous questions during his deposition, Complainants never filed an objection or motion *in limine* regarding Mr. Seymour's opinions or conclusions.[3]

Throughout Mr. Seymour's testimony at the hearing, Complainants made no objection to any of his opinions or conclusions regarding his constituent comparison opinion. PCB13-15 Hearing Transcript, Feb. 1, 2018, pp. 281:4-284:4, Feb. 2, 2018, pp. 14:6-20:17, 69:4-70:9, 92:11-93:2, 118:18-119:18, Feb. 2, 2018, pp. 231:2-280:22. At the end of Mr. Seymour's direct testimony, MWG moved to enter the exhibits discussed in Mr. Seymour's testimony, including his expert report as Exhibit 903, the supplement to Mr. Seymour's report as Exhibit 904, and the updates to Mr. Seymour's report as part of the expert hearing presentation as Exhibit 901. PCB13-15 Hearing Transcript, Feb. 2, 2018, p. 128:7-9. Complainants stated they had "No objection" to the admission of all of the exhibits. PCB13-15 Hearing Transcript, Feb. 2, 2018, p. 128:18. Thereupon, the Hearing Officer held that "Respondent Exhibits 900, 901, 902, 903, 904, 905, 906, 907, and 908 [were] admitted." PCB13-15 Hearing Transcript, Feb. 2, 2018, p. 128:21-23.

During cross-examination of Mr. Seymour, Complainants asked practically *identical* questions as were asked at the Seymour deposition. Again, Complainants asked Mr. Seymour about his methodology for the constituent comparison, the detection limits of the constituents, and even asked Mr. Seymour to compare the table in his report to a groundwater monitoring report. PCB13-15 Hearing Transcript, Feb. 2, 2018, pp. 231:2-280:22. In particular, just like the deposition,

[3] Pursuant to Hearing Officer's Order dated April 11, 2017, all motions *in limine* were to be filed by May 22, 2017.

Complainants asked Mr. Seymour to compare the detection levels of antimony in the leachate results to the detection levels of antimony in the Waukegan groundwater monitoring results:

> Q: If you look at Table 5-4 of your supplemental report, in the Waukegan -- we'll stick with Waukegan to keep it simple, I want to talk about antimony. Based on this table
>
> * * *
>
> Q: For purposes of this table, were you treating antimony as an indicator of coal ash leachate?
>
> A: Yes.
>
> Q: How much antimony was there in the leachate that EPRI tested? You might have to look at Table 5-2 of your original report.
>
> * * *
>
> A: For an [antimony], we found a range in EPRI the data -- … of .2 to .6 micrograms per liter.
>
> * * *
>
> Q: Was the groundwater test used by Midwest Generation in 2014 sensitive enough to detect that amount of antimony?
>
> A: I don't recall. I would have to look.
>
> Q: You can look at 268-P. That should show you.
>
> A: The results for antimony looks to be less than three micrograms per unit, I believe. I'd have to check the units. It's less than three micrograms per unit.
>
> Q: Okay. That's -- the detection limit was three?
>
> A: Yes.
>
> Q: So was that test sensitive enough to detect the concentrations you saw in every leachate?
>
> A: That doesn't look to be.
>
> PCB13-15 Hearing Transcript, Feb. 2, 2018, p. 259:5 – 261:8

Despite having prior notice of Mr. Seymour's opinion, and despite replicating the deposition questions at the hearing, during their entire cross-examination of Mr. Seymour, Complainants did not object to any of his testimony, nor move to strike any of his testimony that they found objectionable. (Transcript of Hearing, Feb. 2, 2018, pp. 231:2-280:22).

On February 26, 2018, Complainants filed their Motion to Strike, which they addressed to the Hearing Officer. Complainants' Motion is the first time that Complainants raised any objection to

Mr. Seymour's expert opinion, expert report or expert testimony. Following receipt of Complainants' Motion, MWG notified them that their motion was in contravention of established law, asked for the basis of the motion, and requested that they withdraw their motion. Without giving MWG any information as to why their motion was not waived and barred by Illinois law, Complainants declined MWG's request to withdraw the motion.

B. Legal Standard

There is no question that the Board has the authority to impose sanctions for a party's unreasonable failure to comply with any Board rule, or Board or hearing officer order. 35 Ill. Adm. Code 101.800(a). The Board has broad discretion in determining whether to impose sanctions for refusal to comply with an order. *Grigoleit Co. v. IPCB,* 184 Ill. Dec. 344, 350, 613 N.E.2d 371, 377 (4th Dist. 1993). Moreover, "hearing officer orders are entitled to the same deference as Board orders, and the Board may impose sanctions for a violation of those orders." *Morton F. Dorothy v. Flex-N-Gate Corp.*, PCB 05-49, 2006 Ill. ENV LEXIS 539 (Nov. 2, 2006), *slip op*. 18. Illinois law unambiguously provides that sanctions are appropriate where a party asserts a proposition contrary to established precedent. *Gambino v. Blvd. Mortg. Corp.,* 398 Ill. App. 21, 73 (1st Dist. 2009). Sanctions are also appropriate where a party fails to address controlling law. *McClaughry v. Village of Antioch*, 296 Ill. App. 3d 636, 645-646 (2nd Dist. 1998). In deciding when sanctions should be imposed, the Board considers factors including: the relative severity of the failure to comply; the past history of the proceeding; the degree to which the proceeding has been delayed or prejudiced; and the existence or absence of bad faith on the part of the offending party or person. 35 Ill. Adm. Code 101.800(c).

The Board has regularly granted sanctions when a party fails to follow hearing officer orders. *Morton F. Dorothy v. Flex-N-Gate Corp.*, PCB 05-49, 2006 Ill. ENV LEXIS 539 (Nov. 2, 2006) (Board granted sanctions for complainant's repeated failure to comply with Board procedural rules

and hearing officer orders). *Gina Patterman v. Boughton Trucking and Materials, Inc.* PCB99-187, 2003 Ill. ENV. LEXIS 459, Aug. 7, 2003 (Board granted sanctions for failing to follow the hearing officer order to complete all depositions by a time certain.); *Illinois EPA v. The Celotex Corp*., PCB 79-145, 1986 Ill. ENV. LEXIS 287 (May 9, 1986) (Board granted sanctions for violating hearing officer orders, and a pattern of disregard of hearing officer deadlines);

In *Citizens Against Regional Landfill v. The County Board of Whiteside County and Waste Management of Illinois, Inc.*, the respondent moved for sanctions against complainant for the complainants' continuing pattern of non-compliance, and specifically for violating the hearing officer's order and filing a brief unsupported by evidence. *Citizens Against Regional Landfill v. The County Board of Whiteside County and Waste Management of Illinois, Inc.*, PCB 92-156, 1993 Ill. ENV. LEXIS 75 (Jan. 21, 1993) *slip op* 11-13. The Board found that the filing of a brief not supported by evidence was a "serious violation of the rules concerning evidence and the rules regarding advocacy." *Id* at 12-13. Finding that the complainant also violated the hearing officer order, the Board granted the respondent's motion for sanctions of attorney's fees, which were allowed under the Board Rules at the time. *Id* at 15.

In this case, Complainants submitted their Motion to Strike long after the Hearing Officer admitted the evidence with no objections, and long after Complainants had full knowledge of their objections from the expert deposition. Knowing that they had not preserved their objections and thus could not properly appeal the Hearing Officer's Order, Complainants fashioned their motion as a Motion to Strike in an attempted end-run around the Board's rules. Complainants' Motion is a "serious violation of the rules concerning evidence and the rules regarding advocacy" (*Id* at 12-13) and should be sanctioned.

C. <u>Complainants' Conduct of Ignoring Settled Law and Causing Undue Expense is Sanctionable.</u>

Complainants' Motion and conduct is sanctionable because their Motion violates the Hearing Officer's Order and Board Rules, and is frivolous on its face. Complainants assert a position that is in patent violation of settled law, fails to address controlling law under the rules of evidence, and continues to cause unnecessary delays, confusion and expense.

a. <u>Complainants' Waived Any Objections to the Expert Testimony and Reports Admitted by the Hearing Officer.</u>

It is well-settled that that "a failure to object at the original proceeding generally constitutes a waiver of the right to raise an issue on appeal." *Peoria Disposal Co. v. Peoria County Board*, PCB 06-184, 2007 Ill. ENV LEXIS 250, *58 (June 21, 2007), *citing E & E Hauling, Inc. v. Pollution Control Bd.*, 107 Ill. 2d 33, 38, 89 Ill. Dec. 821, 823, 481 N.E.2d 664, 666 (1985). In MWG's Response to Complainants' Motion ("MWG's Response"),[4] MWG details how Complainants' Motion is frivolous and should be denied because Complainants waived all objections to the expert testimony and reports. MWG's Response is attached to this Motion as Attachment A. The Illinois Supreme Court has stated that a "…failure to object to the admission of evidence operates as a waiver of the right to consider the question on appeal. *People v. Carlson*, 79 Ill. 2d 564, 576, 38 Ill. Dec. 809, 814, 404 N.E.2d 233, 238 (1980). Additionally, even when the grounds "…for the objection do not appear until after the admission of the evidence, the opponent must make a motion to strike at that time." *Hardy v. Cordero*, 399 Ill. App. 3d 1126, 1135, 340 Ill. Dec. 718, 725, 929 N.E.2d 22, 29 (3rd Dist., 2010). The Board has also held that it "is well-settled that a failure to object at the original proceeding generally constitutes a waiver of the right to raise an issue on appeal." *Peoria Disposal Co. v. Peoria County Board*, PCB 06-184, 2007 Ill. ENV LEXIS 250,

[4] Pursuant to the March 8, 2018 Hearing Officer's Order, MWG's Response to Complainants' Motion to Strike was due on March 20, 2018.

*58 (June 21, 2007), *citing E & E Hauling, Inc. v. Pollution Control Bd.*, 107 Ill. 2d 33, 38, 89 Ill. Dec. 821, 823, 481 N.E.2d 664, 666 (1985). As explained by the Illinois Supreme Court, the purpose of requiring objections at trial to errors is so that there can be a "timely resolution of evidentiary questions at trial." *People v. Carlson*, 79 Ill. 2d at 576, *citing People v. Roberts*, 75 Ill. 2d 1, 10 (1979).

Here, Complainants waived any right to appeal the admission of MWG's expert report, expert opinion, or expert testimony, because they failed to object to the testimony at the hearing and expressly stated they had "no objection" to the admission of the expert reports. PCB13-15 Hearing Transcript, Feb. 1, 2018, pp. 281:4-284:4, Feb. 2, 2018, pp. 14:6-20:17, 69:4-70:9, 92:11-93:2, 118:18-119:18, Feb. 2, 2018, pp. 128:18, 231:2-280:22.*See also* Attachment A, MWG's Response, Sec. II.

Complainants' cannot claim that their objection only arose after the hearing because Mr. Seymour's opinion was not new and Complainants had many opportunities even before the hearing in this matter to raise an objection about it. In fact, Mr. Seymour's constituent comparison opinion that is the subject of Complainants' Motion to Strike was first presented in Mr. Seymour's Expert Report dated November, 2015, and admitted as Exhibit 903. Mr. Seymour was deposed on March 1, 2016 and Complainants' counsel asked multiple questions about the constituent comparison at that time. Notably, the questions asked at the deposition were virtually identical to the questions Complainants asked at the hearing, including the same line of questioning regarding the detection levels of antimony. *See supra* Sec. A., *See also* Attachment A, MWG's Response, Sec. II., and Exhibit 1 of Attachment A, March 1, 2016 Seymour Dep. Before the hearing, Complainants' had the opportunity to file a motion *in limine*, but did not file any objections to Mr. Seymour's constituent comparison. This issue could have – and should have – been resolved well before the hearing began and could have avoided significant time and expense. By waiting until long after

the close of evidence, Complainants preclude MWG from the opportunity to have the expert further explain his analysis or otherwise resolve objections raised at the hearing. This lack of diligence further evidences an unreasonable failure to comply with Board Rules.

b. Complainants' Motion Violates the Hearing Officer's Ruling and Order.

Complainants' Motion violates the Hearing Officer's ruling and order to admit the testimony and the expert reports. On February 2, 2018, hearing no objections, the Hearing Officer held that "Respondent Exhibits 900, 901, 902, 903, 904, 905, 906, 907, and 908 [were] admitted." PCB 13-15 Hearing Transcript, Feb. 2, 2018, p. 128:21-23. Even if Complainants had not waived their right to file their Motion to Strike, the Board Rules require that Complainants must file an appeal of the Hearing Officer's order admitting the expert testimony and documents. Instead, Complainants fashion their argument as a Motion to Strike, directed to the Hearing Officer. Yet the Hearing Officer specifically ruled during the hearing that the testimony, expert reports and documents were admitted as evidence.

A ruling to admit or deny admission of an exhibit is an order by the Hearing Officer. *People of the State of Illinois v. Panhandle Eastern Pipeline Company*, PCB99-191, February 1, 2001, 2001 Ill. ENV LEXIS 66, *13 (Board called hearing officer's denial of admission of an exhibit an "order."). Pursuant to Section 101.502(b) and 101.518, an appeal of a hearing officer ruling made at hearing must be made to the Board within 14 days of receiving the transcript. 35 Ill. Adm. Code 101.502(b), 101.518. Complainants cannot be permitted to avoid their waiver and purposefully disregard applicable rules by simply re-naming their motion. As further explained in MWG's Response, Complainants' Motion is in violation of the Board Rules and the Hearing Officer's Order because it is not an appeal of the Hearing Officer's Order to admit MWG's expert's reports and testimony, as required by Sections 101.502(b) and 101.518, of the Board Rules. 35 Ill. Adm. Code 101.502(b), 101.518. *See* Attachment A, MWG's Response, Sec. III.

c. Complainants' Have Shown a Pattern of Causing Undue Cost and Expense in their "Campaign" to End Coal.

It is public knowledge that Complainant Sierra Club has an ongoing "campaign" to shut down coal use. *See* Grunwald, Michael. "Inside the War on Coal." *Politico*, May 26, 2015, https://www.politico.com/agenda/story/2015/05/inside-war-on-coal-000002, attached as Attachment B. Part of that campaign is an effort to force entities like MWG that operate coal-fired power-plants to needlessly spend money, time and effort to support their facilities. This is further supported by MWG Exhibit 662, Sierra Club's 2014 Team IL-Beyond Coal Campaign Plan, which clearly shows that Sierra Club has a specific campaign to secure retirement dates of all of MWG's fleet.[5] Complainants' Motion to Strike, with no basis in law, as well as Exhibit 662, is evidence of this campaign. Indeed, over the course of the hearing, a pattern of delay and unnecessary expense became even more evident. Throughout the ten days of hearing, Complainants caused numerous unnecessary delays. Both on and off the record, the Hearing Officer noted Complainants' delays and disorganization. On multiple occasions, when discussing Complainants' exhibits, the Hearing Officer remarked that the Complainants had about a year to prepare, and he was frustrated by the disorganization and resulting confusion. *See* Oct. 23, 2017 Hearing Transcript, pp. 184:22 – 185:3, Oct. 24, 2017 Hearing Transcript pp. 226:16-227:3, Oct. 25, 2017 Hearing Transcript, pp. 168:11-169:2, and Jan. 31, 2018 Hearing Transcript, p. 203:5-10).

On one of those occasions, the Hearing Officer stated:

> "That's why I suggested for the last, I don't know how many months, to get together to try to work things and hone things down. **Lately, you been giving me questionable -- cumulative and duplicate stuff.** You know, the other stuff you've been giving me, exhibits, some have too many pages on them. Some don't have enough. **There seems to be a pattern.** I can't really with this. If he can't testify to the best of his knowledge, this is true

[5] The Hearing Officer declined to admit or exclude Exhibit 662, but ordered the parties to brief the issues. On March 1, 2018, after briefs were submitted, the Hearing Officer ruled to exclude Exhibit 622 finding that it was not relevant. MWG will file a timely appeal of the Hearing Officer's decision to exclude Exhibit 662. Complainants' Motion to Strike provides additional grounds to establish the relevancy of Exhibit 622 and Complainants' pattern of conduct.

> and accurate, I can't see him stating yes or no. So, I sustained, and you know Ms. Gale's objection, but we've got to do a better job on exhibits and laying foundation. It doesn't take much." PCB 13-15 Hearing Transcript, October 25, 2017, pp. 168:11- 169:2. (emphasis added)

Complainants' pattern and practice of disorganization related to exhibits caused unnecessary delays in the hearing, and thus unnecessary costs to MWG. As evidenced by the multiple comments by the Hearing Officer on the record, as wells as numerous admonitions to Complainants off the record, Complainants' delays were so prevalent and consistent that they must be interpreted to be part of an intentional effort to cause undue cost to MWG. The intention and goal of causing undue costs is demonstrated in MWG Exhibit 662, Sierra Club's 2014 Team IL-Beyond Coal Campaign Plan, and by Sierra Club's public comments, in which Complainants state they have a specific goal to secure retirement dates of all of MWG's fleet. *See* Attachment B.

d. Complainants Fail to Properly Apply Substantive Law for Admitting Expert Evidence.

Even if Complainants can somehow avoid their waiver for failing to timely object to the expert evidence, Complainants' Motion is frivolous because Complainants fail to fully address the applicable law. As an initial matter, the Board Rule on admission of evidence is more broad, and the Board accepts evidence that is "material, relevant, and would be relied upon by a prudent person in the conduct of serious affairs. 35 Ill. Adm. Code 101.626. Under the Board's standard, Mr. Seymour's constituent comparison analysis is clearly admissible – as the Hearing Officer determined at the hearing. The Hearing Officer stated on many occasions throughout the hearing that any concerns about evidence would go to the weight. *See*, PCB13-15 Hearing Transcript, Oct. 27, 2017, p. 53:16:21, Oct. 23, 2017, p. 104:15:18, Oct. 24, 2017, p. 111:5-11, Oct. 25, 2017, p. 62:15-18 and 185:2-6, Jan. 30, 2018, p. 67:14:18. Complainants' Motion to Strike relies on an analysis under the *Frye* standard in Rule 702 of the Illinois Rules of Evidence. Ill. R. Evid. 702. However, Complainants rely only on the second part of Rule 702, ignoring the preliminary

question of whether an opinion is new or novel. Rule 702 sets forth a two part analysis. Ill. R. Evid. 702. If a scientific, technical or other specialized knowledge will assist the trier of fact, then a qualified expert may form an opinion. Ill. R. Evid. 702. *Only where* an expert witness testifies to an opinion based on a new or novel scientific methodology or principle, does a party have to show that the methodology is generally accepted. *Id*, *People v. Simons*, 213 Ill. 2d 523, 530, 821 N.E.2d 1184, 1189 (2004), *citing*, *Donaldson v. Central Illinois Public Service Co.*, 199 Ill. 2d 63, 78-79, 767 N.E.2d 314 (2002).

Under the first part of the Rule 702 analysis, Mr. Seymour's methodology is plainly standard and neither new nor novel. *See also* Attachment A, MWG's Response, Sec. IV. Mr. Seymour specifically testified that his constituent comparison simply compared constituents found in MWG's ash ponds with the constituents found in groundwater. PCB13-15 Hearing Transcript, Feb. 2, 278:8-10. In this case, he presented that information in percentages for ease of explaining a great deal of groundwater and leachate data. PCB13-15 Hearing Transcript, February 1, 2018, pp. 282:22-24, Feb. 2, 2018, p. 278:8-16. His methodology of comparing constituents in one medium with another is basic and widely accepted. PCB13-15 Hearing Transcript, Feb. 1, 282:12-13. In fact, Complainants' own expert conducted the same type of comparison in his report. Complainants' expert's report repeatedly states that he matched the groundwater to the coal ash leachate characteristics. In particular, on page two of his report, Complainants' expert stated "At all of the power plant sites, the concentrations of B, Mn, and SO4 measured in ground water **match** the leachate characteristics of coal ash." Ex. 401, p. 2, *see also*, Ex. 401, pp. 12, 18, 25, 32, and 35, and Attachment A, MWG's Response, Sec. IV. Even assuming Complainants had not waived their right to object at this time, under the applicable Board Rules and Illinois law, Mr. Seymour's constituent comparison opinion is admissible and proper.

D. Conclusion

a. The Board Should Sanction Complainants for Their Failure to Follow Board Rules and Causing MWG Undue Costs.

Complainants' Motion is not warranted by existing law or supported by a good-faith argument, and thus the Board should order sanctions. Complainants' Motion is contrary to established Illinois and Board precedent because it was filed long after the hearing and without preserving the right to object at the hearing. *See* Attachment A, MWG's Response, Sec. III. Complainants' Motion is also a clear violation of the Hearing Officer's Order to admit the expert reports and testimony. *See* Attachment A, MWG's Response, Sec. III. Had Complainants' timely stated their objections before the hearing, or even during the hearing, MWG could have elicited additional testimony to resolve the objections. By filing a post-hearing Motion to Strike with no prior objections, Complainants rob MWG of the ability to timely resolve the evidentiary questions at the hearing. *People v. Carlson*, 79 Ill. 2d at 576. Moreover, Complainants' Motion is frivolous because it intentionally ignores the Board's more liberal standard for admitting evidence and neglects to address the first part of the analysis required by Rule 702 of the Illinois Rules of Evidence. *See* Attachment A, MWG's Response, Sec. IV.

Complainants' Motion is part of their ongoing pattern of causing undue delays and cost to MWG. *See supra* Section B.1. Complainants are represented by a team of experienced counsel. Complainants' frivolous motion in contravention of Board Rules and well settled law, in combination with a pattern of delay and a public "campaign" to end coal by forcing MWG to spend unnecessary costs, is basis for sanctions. *Citizens Against Regional Landfill v. The County Board of Whiteside County and Waste Management of Illinois, Inc.*, 1993 Ill. ENV. LEXIS 75, *slip op* 12-13.

b. Requested Sanctions

Under the Board Rules, sanctions may include barring the offending person from filing pleadings or documents relating to issues to which the failure relates, and may also include striking any portion of the offending party's pleadings. 35 Ill. Adm. Code 100.800(b)(3) and (5). Due to Complainants' sanctionable pattern and filing of a frivolous motion, the Board should bar the Complainants from making any of the arguments made in their untimely Motion to Strike in any of Complainants' future briefs or motions in this matter. Additionally, because of Complainants' apparent intent to cause MWG unnecessary costs, the Board should overrule the Hearing Officers' exclusion of MWG Exhibit 662, the 2014 Team IL – Beyond Coal Campaign Plan, which further supports Complainants' intent to cause MWG unnecessary expense.

Without sanctions in cases like this one, parties appearing before the Board are effectively encouraged to attempt to bypass applicable rules, conduct inefficient proceedings, and file motions that have no basis in fact or law. MWG requests that the Board grant MWG's motion for sanctions and issue an order with the aforementioned relief and such other relief as the Board deems appropriate.

Respectfully submitted,
Midwest Generation, LLC

By: /s/ Jennifer T. Nijman
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EXHIBIT A

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

In the Matter of:	)	
	)	
SIERRA CLUB, ENVIRONMENTAL LAW AND POLICY CENTER, PRAIRIE RIVERS NETWORK, and CITIZENS AGAINST RUINING THE ENVIRONMENT	)	
	)	**PCB 2013-015**
Complainants,	)	**(Enforcement – Water)**
	)	
v.	)	
	)	
MIDWEST GENERATION, LLC,	)	
	)	
Respondent.	)	

MIDWEST GENERATION, LLC'S RESPONSE TO COMPLAINANTS' MOTION TO STRIKE PORTIONS OF RESPONDENT EXPERT'S REPORTS AND TESTIMONY

The Hearing Officer should deny Complainants' Motion to Strike Portions of Respondent Expert's Reports and Testimony ("Complainants' Motion" or "Motion to Strike"), because the Motion to Strike violates the Hearing Officer's Order and Illinois Pollution Control Board ("Board") Rules. Complainants have waived any objection to the expert reports and the expert testimony by failing to object to the evidence when it was admitted by the Hearing Officer during the hearing. Even if Complainants could somehow avoid a waiver, Complainants' Motion fails to fully address the analysis required by the Board's Rules for admitting evidence or by Rule 702 of the Illinois Rules of Evidence.

Because the Motion to Strike is in violation of Board Rules and Complainants clearly waived any right to object to the evidence, the Motion to Strike is not warranted by existing law and has caused a needless increase in the costs of litigation for MWG. Complainants' Motion is part of a pattern of delays and is consistent with the Sierra Club's public "campaign" to shut down coal by

forcing MWG to incur unnecessary costs. Concurrent with this Response, Midwest Generation, LLC ("MWG") is asking the Board to grant sanctions pursuant to 35 Ill. Adm. Code 101.800 and is seeking admission of MWG Exhibit 622, Sierra Club's 2014 Team IL-Beyond Coal Campaign Plan. [1]

I. Brief Background

During the hearing on this matter on February 1, 2018, MWG's Expert Witness, Mr. John Seymour, presented his opinion that constituents in the groundwater under the MWG stations did not match the constituents detected in the MWG coal ash (the "constituent comparison"). PCB13-15 Hearing Transcript, Feb. 1, 2018, pages 281:13 – 284:4. Mr. Seymour originally presented this constituent comparison as part of his expert report submitted to Complainants on November 2, 2015 and supplemented on February 29, 2016. MWG Exhibits 903, Section 5.5.2 and 904. On March 1, 2016, Complainants deposed Mr. Seymour, and specifically asked him about his method of conducting the constituent comparison, the detection limits of the constituents, and even asked Mr. Seymour to compare the table in his report to a groundwater monitoring report. *See* excerpt of John Seymour Dep. March 1, 2016, attached as Exhibit 1. Pursuant to the Hearing Officer's Order dated April 11, 2017, all motions *in limine* were to be filed by May 22, 2017. Despite having notice of Mr. Seymour's opinion and opportunity to object, Complainants did not file any motion *in limine* to limit Mr. Seymour's opinion or testimony.

Mr. Seymour supported his testimony about the constituent comparison with a detailed PowerPoint presentation that contained more recent, updated groundwater data. MWG Exhibit

[1] The Hearing Officer declined to admit or exclude Exhibit 662, but ordered the parties to brief the issues. On March 1, 2018, after briefs were submitted, the Hearing Officer ruled to exclude Exhibit 622 finding that it was not relevant. MWG will file a timely appeal of the Hearing Officer's decision to exclude Exhibit 662. Complainants' Motion to Strike provides additional grounds to establish the relevancy of Exhibit 622 and Complainants' pattern of conduct.

901, pp 11-12. The PowerPoint was provided to the Complainants on January 30, 2018. Still, Complainants did not file an objection or a motion *in limine* regarding Mr. Seymour's opinion or conclusions.

At the hearing, Mr. Seymour provided detailed testimony about the process he used for his constituent comparison. He testified that he conducted a comparison of the occurrence of constituents in groundwater with constituents of the ash stored in the MWG ash ponds and concluded that the profiles of the constituents in the groundwater did not match the profiles of leachate constituents in the ponds at the plant sites. PCB13-15 Hearing Transcript, Feb. 1, 2018, pp. 281:4-284:4, Feb. 2, 2018, pp. 14:6-20:17, 69:4-70:9, 92:11-93:2, 118:18-119:18. He further testified that this type of comparison is performed all the time and is "standard" in his field. PCB13-15 Hearing Transcript, Feb. 1, 2018, p. 283:1-3. Throughout Mr. Seymour's lengthy testimony, Complainants made no objections to any of his statements regarding his constituent comparison. *Id*. At the end of Mr. Seymour's direct testimony, MWG moved to enter the exhibits discussed during Mr. Seymour's testimony including his expert report as Exhibit 903, the supplement to Mr. Seymour's report as Exhibit 904, and the updates to Mr. Seymour's report as part of the expert hearing presentation as Exhibit 901. PCB13-15 Hearing Transcript, Feb. 2, 2018, p. 128:7-9. Complainants stated they had "No objection" to the admission of all of the exhibits. PCB13-15 Hearing Transcript, Feb. 2, 2018, p. 128:18. Thereupon, the Hearing Officer held that "Respondent Exhibits 900, 901, 902, 903, 904, 905, 906, 907, and 908 [were] admitted." PCB13-15 Hearing Transcript, Feb. 2, 2018, p. 128:21-23.

During their cross-examination, Complainants asked Mr. Seymour questions regarding his constituent comparison. PCB13-15 Hearing Transcript, Feb. 2, 2018, pp. 231:2-280:22. Complainants repeated the same line of questions during Mr. Seymour's cross-examination at the

hearing on February 2, 2018 as the questions that they asked during his March 1, 2016 deposition. PCB13-15 Hearing Transcript, Feb. 2, 2018, pp. 231:2-280:22, and Exhibit 1, Seymour Dep. Yet, throughout Mr. Seymour's testimony regarding his constituent comparison, Complainants did not object to Mr. Seymour's testimony, nor move to strike Mr. Seymour's testimony. *Id*.

On February 26, 2018, long after the hearing, Complainants filed their Motion to Strike, which they directed to the Hearing Officer. Complainants' Motion to Strike is the first time that Complainants made *any* objection to Mr. Seymour's expert opinion, expert report or expert testimony. Following receipt of Complainants' Motion, MWG notified Complainants that their Motion to Strike was in contravention of established law, asked for the basis of the motion, and requested that they withdraw the motion. Without giving MWG any information as to why their motion was not waived and barred by Board Rules or Illinois law, Complainants declined MWG's request to withdraw the motion.

II. Sierra Club Waived Any Right to Appeal Admission of the Expert Reports or Testimony By Failing to Object at the Hearing

There is no question that Complainants have waived the right to appeal or strike the admission of any part of the expert reports or testimony. A "…failure to object to the admission of evidence operates as a waiver of the right to consider the question on appeal. *People v. Carlson,* 79 Ill. 2d 564, 576, 38 Ill. Dec. 809, 814, 404 N.E.2d 233, 238 (1980), *citing People v. Newbury,* 53 Ill. 2d 228, 238-39 (1972); *People v. Scott,* 52 Ill. 2d 432, 439 (1972), cert. denied (1973), 410 U.S. 941, 35 L. Ed. 2d 607, 93 S. Ct. 1406; *People v. McCorry*, 51 Ill. 2d 343, 349, (1972); *People v. Linus*, 48 Ill. 2d 349, 355 (1971). The Illinois Supreme Court noted that "it is fundamental to our adversarial system that counsel object at trial to errors," so that there can be a "timely resolution of evidentiary questions at trial." *People v. Carlson*, 79 Ill. 2d at 576, *citing People v. Roberts*, 75 Ill. 2d 1, 10 (1979). "A party must make a timely objection to preserve an issue for appellate

review." *Spurgeon v. Mruz*, 358 Ill. App. 3d 358, 360, 295 Ill. Dec. 170, 172, 832 N.E.2d 321, 323 (1st Dist. 2005). "Timeliness requires that objections to evidence be made at the time the evidence is offered or as soon as grounds for the objection become apparent. *Id, citing Sinclair v. Berlin*, 325 Ill. App. 3d 458, 467, 758 N.E.2d 442, 259 Ill. Dec. 319 (1st Dist. 2001). Thus, when a party acquiesces to the admission of evidence, the party "cannot contest the admission of the evidence on appeal." *People v. Bush*, 214 Ill. 2d 318, 332-33, 292 Ill. Dec. 926, 934-35, 827 N.E.2d 455, 463-64 (2005). Even when the grounds "for the objection do not appear until after the admission of the evidence, the opponent must make a motion to strike at that time." *Hardy v. Cordero*, 399 Ill. App. 3d 1126, 1135, 340 Ill. Dec. 718, 725, 929 N.E.2d 22, 29 (3rd Dist., 2010); *Netto v. Goldenberg*, 266 Ill. App. 3d 174, 179, 203 Ill. Dec. 798, 802, 640 N.E.2d 948, 952 (1st Dist. 1994), *People v. Koch*, 248 Ill. App. 3d 584, 593-94, 188 Ill. Dec. 77, 83, 618 N.E.2d 647, 653 (1st Dist. 1993), *Levin v. Welsh Brothers Motor Service, Inc*., 164 Ill. App. 3d 640, 659, 518 N.E.2d 205, 217, 115 Ill. Dec. 680 (1st Dist. 1987), appeal denied, (1988), 119 Ill. 2d 558, 522 N.E.2d 1246.

In *Levin v. Welsh Brothers Motor Service, Inc*., the defendant argued that part of the expert witness's testimony should be stricken because the opinion was not within the expert's expertise. *Levin*, 164 Ill. App. 3d at 658. However, the defendant did not object to the expert's conclusions during the expert's testimony, nor move to strike the testimony while the expert was on the stand. *Id*. Instead, the defendant moved to strike the testimony after both parties had rested their cases. *Id*. Because defendant had waited until both parties had rested their case to move to strike the expert's testimony, the Court held that the defendant waived that motion. *Id.*[2]

[2] Additionally, the Court found that the defendant had conducted a "vigorous cross-examination" of the expert witness, and thus was not unduly prejudiced by the testimony. *Levin*, 164 Ill. App. 3d at 659. Similarly, at the hearing in this matter, Complainants conducted a four hour cross-examination of Mr. Seymour, including his

Similarly, in *People v. Koch*, the defendant did not object to the admissibility of a witness's testimony at the trial, but instead first objected to the testimony in a post-trial motion. *People v. Koch,* 248 Ill. App. 3d at 593. The defendant argued that he could not object to the testimony at the time it was given because it was not evident that it was hearsay and inadmissible until another witness testified later in the proceeding. *Id*. The Court rejected that argument, stating:

> "It has long been established that an objection to evidence is untimely if not asserted as soon as its ground becomes apparent. Where the ground for objection does not appear until after the admission of the evidence, the appropriate action for its opponent is to make a motion to strike. After the basis of the motion to strike is available, **it must be made as soon as practicable, or the would-be movant will be deemed to have waived any complaint with regard to that evidence**." *Id*. (*internal citations omitted*, emphasis added).

The Court found that the defendant was aware of the hearsay nature of the testimony well before the objection to the testimony was asserted for the first time in the post-trial motion. *Id*. Relying upon two similar cases in which the movant failed to move to strike the inadmissible evidence until after long after the movant was aware of an objection to the evidence, the Court found that defendant's failure to move to strike constituted a waiver of the issue. *Id* at 594, *citing People v. Driver*, 62 Ill. App. 3d 847, 379 N.E. 840 (4th Dist. 1978), *People v. Bean,* 17 Ill. App. 3d 377, 308 N.E.2d 334 (1st Dist. 1974).

Consistent with Illinois courts, the Board has also held that it "is well-settled that a failure to object at the original proceeding generally constitutes a waiver of the right to raise an issue on appeal." *Peoria Disposal Co. v. Peoria County Board*, PCB 06-184, 2007 Ill. ENV LEXIS 250, *58 (June 21, 2007), *citing E & E Hauling, Inc. v. Pollution Control Bd.*, 107 Ill. 2d 33, 38, 89 Ill. Dec. 821, 823, 481 N.E.2d 664, 666 (1985) (Board held that the complainants' failure to object to certain Peoria County Board members participation at the local meetings waived any later

constituent comparison opinion at issue here, and thus cannot claim prejudice by the testimony. PCB13-15 Hearing Transcript, Feb. 2, 2018, pp. 231:2-280:22).

objection to bias). *Barbara and Ronald Stuart v. Franklin Fisher and Phyllis Fisher*, PCB02-164, 2004 Ill. ENV LEXIS 513, *21-22 (September 16, 2004) (Board held that because complainants did not object to the hearing officer's order excluding the sound measurement evidence, complainants had waived any objection). *St. Clair County v. Village of Sauget et al*, PCB 93-51 1993 Ill. ENV LEXIS 635, *9-10 (July 1, 1993) (Citing *E & E Hauling, Inc.*, the Board found that St. Clair County waived its claim of violations of fundamental fairness by failing to object to the admission of evidence at the hearing).

In particular, in *West Suburban Recycling and Energy Center, L.P. v. Illinois EPA*, the Board held that a "failure to object at the original proceeding constitutes a waiver of the right to raise the issue on appeal." *West Suburban Recycling and Energy Center, L.P. v. Illinois EPA,* PCB 95-119 and 95-125, 1996 Ill. ENV. LEXIS 718, *slip op.* at 23-34, at 26 (Oct. 17, 1996). In that case, the Illinois EPA raised a specific objection to evidence for the first time in its post-hearing motion. *Id* at *25. The Board rejected Illinois EPA's claim because the Illinois EPA failed to raise its objections at the hearing. *Id* at *27.

Here, Complainants have waived the right to appeal the admission of any part of MWG's expert report, expert opinion, or expert testimony. Mr. Seymour's opinion regarding his constituent comparison were first made in his original report submitted to Complainants in November 2015. MWG Exhibit 903, section 5.5.2, pp 42-43. Mr. Seymour specifically updated his constituent comparison in February 2016 (MWG Exhibit 904), and Complainants took all the opportunity they needed to question Mr. Seymour on his constituent comparison opinion at his March 1, 2016 deposition. *See* excerpt of John Seymour Deposition attached as Exhibit 1. Complainants' deposition questions were remarkably similar to Complainants' questions at the hearing. *See* Seymour Dep., Exhibit 1. For example, during the deposition Complainants asked Mr. Seymour

about the constituent comparison methodology, “So what is -- if a pollutant is detected in both the groundwater and the leachate, then that's a match?” and Mr. Seymour responded in the affirmative. Seymour Dep., Exhibit 1, p. 123:13-15. Complainants also asked Mr. Seymour about constituent concentrations below the detection limit, “If there's a pollutant -- if a pollutant is below detection in groundwater, does that mean there is none of it in the groundwater?” Mr. Seymour responded that, “Well, by definition, if it's not detected, we're not including it.” Seymour Dep., Exhibit 1, pp. 124:12 – 125:1. Further, Complainants compared groundwater data from a groundwater monitoring report to Mr. Seymour’s table and Complainants specifically asked Mr. Seymour to compare the detection levels of antimony at Waukegan:

> Q: Let's consider antimony, just as another point of comparison. If we look at Table 5-4 of your report –
>
> A: For Waukegan?
>
> Q: For Waukegan also.
>
> A: Okay.
>
> * * *
>
> Q: So here we show in Table 5-4 of your report -- we show antimony as being in that leachate, correct? Because it was only an indicator if it was in it --
>
> A: Yes.
>
> Q: -- is that right? But it's not present in the groundwater samples for any of the wells; is that correct?
>
> A: Yes.
>
> Q: Let's see how much antimony was detected in the leachate data. So if we can look at 5-2, Table 5-2, page 1 of that table.
>
> * * *
>
> Q: So is it correct that the concentrations of antimony in leachate for sub-bituminous coal range between .00024 and .00062 milligrams per liter?
>
> A: In the impoundment for sub-bituminous coal, antimony was found at those levels in parts per million.
>
> Q: Okay. So that is less than .001 milligrams per liter, correct?
>
> A: Yes.

> Q: Now, let's compare how much antimony was detected in the groundwater. If you would look back at the same monitoring data, page 56445 [*of the "Annual and Quarterly Groundwater Monitoring Results - Fourth Quarter, 2015," identified as Ex. 9 in the deposition*]
>
> A: I've got it.
>
> Q: -- from Monitoring Well 2. We have a non-detect, right, for antimony for each of those dates in 2014?
>
> A: Yes.
>
> Q: And the detection level of that is .0030, correct?
>
> A: Yes.
>
> Q: So with the concentrations of antimony that were found in the EPRI leachate data, up to .00062 milligrams per liter, would that amount of antimony be detectible in groundwater using this detection limit?
>
> A: It does not look like it would be.
>
> (Seymour Dep., Ex. 1, pp. 134:19 – 139:24)

Despite being fully aware of the constituent comparison opinion, Complainants did not file a motion *in limine* regarding Mr. Seymour's opinion prior to the hearing.

Even though Complainants were aware of the constituent comparison opinion at least two years before the hearing, and even though Complainants' questioned Mr. Seymour about the opinion during his deposition, Complainants still failed to object when the very same opinion was presented at the hearing. Mr. Seymour supported his hearing testimony about the constituent comparison with a detailed PowerPoint presentation that contained more recent, updated groundwater data. MWG Exhibit 903, pp 11-12. The PowerPoint was provided to Complainants on January 30, 2018. Still, Complainants did not object. At the hearing, Complainants did not object to any of Mr. Seymour's testimony regarding his constituent comparison opinion, and explicitly stated that they had "No objection" to the admission of any of Mr. Seymour's reports or the PowerPoint. PCB13-15 Hearing Transcript, Feb. 2, 2018, p. 128:18 (emphasis added).

During cross-examination of Mr. Seymour at the hearing, Complainants asked practically *identical* questions as were asked of Mr. Seymour at the deposition. In particular, Complainants

again asked Mr. Seymour to compare the detection levels of antimony in the leachate results to the detection levels of antimony in the Waukegan groundwater monitoring results:

> Q: If you look at Table 5-4 of your supplemental report, in the Waukegan -- we'll stick with Waukegan to keep it simple, I want to talk about antimony. Based on this table
>
> * * *
>
> Q: For purposes of this table, were you treating antimony as an indicator of coal ash leachate?
>
> A: Yes.
>
> Q: How much antimony was there in the leachate that EPRI tested? You might have to look at Table 5-2 of your original report.
>
> * * *
>
> A: For an [antimony], we found a range in EPRI the data -- … of .2 to .6 micrograms per liter.
>
> * * *
>
> Q: Was the groundwater test used by Midwest Generation in 2014 sensitive enough to detect that amount of antimony?
>
> A: I don't recall. I would have to look.
>
> Q: You can look at 268-P. That should show you.
>
> A: The results for antimony looks to be less than three micrograms per unit, I believe. I'd have to check the units. It's less than three micrograms per unit.
>
> Q: Okay. That's -- the detection limit was three?
>
> A: Yes.
>
> Q: So was that test sensitive enough to detect the concentrations you saw in every leachate?
>
> A: That doesn't look to be.
>
> PCB13-15 Hearing Transcript, Feb. 2, 2018, p. 259:5 – 261:8

Despite having prior notice of Mr. Seymour's opinion, and despite replicating the deposition questions at the hearing, *still* Complainants did not object to any of his testimony, nor move to strike any of his testimony that they found objectionable. PCB13-15 Hearing Transcript, Feb. 2, 2018, pp. 231:2-280:22). Mr. Seymour's constituent comparison has not changed since it was

issued in his report in 2015. By filing the Motion to Strike now, Complainants unfairly preclude MWG from eliciting testimony from Mr. Seymour to address the objection.

Ultimately, the ship has sailed on any objections to Mr. Seymour's opinion. Complainants' Motion to Strike should be denied on the grounds they have waived the right to object to the constituent comparison opinion because they failed to raise the objection when it first arose. *E & E Hauling, Inc. v. Pollution Control Bd.*, 107 Ill. 2d at 38; *People v. Carlson*, 79 Ill. 2d at 576, *Peoria Disposal Co. v. Peoria County Board*, PCB 06-184, 2007 Ill. ENV LEXIS 250, *58 (June 21, 2007).

III. Sierra Club's Motion is an Improper Appeal of the Hearing Officer's Decision

Although Complainants title their motion a "Motion to Strike", it is actually an appeal of an order by the Hearing Officer. The Hearing Officer admitted as evidence the testimony and reports that contain MWG's constituent comparison analysis. Any disagreement with a Hearing Officer's Order must be preserved at the hearing and appealed to the Board. Complainants cannot be permitted to do an end-run around the Board Rules and their failure to timely object by simply re-naming their motion.

On February 1, 2018, the Hearing Officer, hearing no objection, held that MWG Exhibits 901, 903 and 904 were admitted. PCB13-15 Hearing Transcript, Feb. 2, 2018, p. 128:21-23. The Hearing Officer made his holding based upon Section 101.626 of the Illinois Pollution Control Board Rules. *Id* and 35 Ill. Adm. Code 101.626. A ruling to admit or deny admission of an exhibit is an order by the Hearing Officer. *People of the State of Illinois v. Panhandle Eastern Pipeline Company*, PCB99-191, Feb. 1, 2001, 2001 Ill. ENV LEXIS 66, *13 (Board called hearing officer's denial of admission of an exhibit an "order."). Pursuant to Section 101.502(b) and 101.518, an objection to a hearing officer ruling made at hearing must be filed within 14 days of receiving the transcript. 35 Ill. Adm. Code 101.502(b), 101.518.

Complainants already know this appeal process as there were at least four appeals of the Hearing Officer's rulings on exhibits from the first week of hearings, including two regarding appealing the Hearing Officer's Order to admit an exhibit. *See MWG's Objection and Appeal from Hearing Officer's Ruling to Admit the Discovery Responses*, Nov. 13, 2017 and *MWG's Objection and Appeal from Hearing Officer's Ruling to Admit Complainants' Exhibit 16*, Nov. 13, 2017. Because the Hearing Officer has already made his decision regarding MWG Exhibits 901, 903 and 904 and the corresponding testimony, under the Board's Rules, Complainants should have appealed the Hearing Officer's ruling to the Board. Of course, as explained above, they could not do so because they failed to timely object to the exhibits and testimony so their appeal was waived. Complainants cannot claim that their objection arose after the hearing because, as described above, Mr. Seymour's opinion was not new and Complainants had many opportunities both before and during the hearing to raise an objection.

As Complainants' Motion is not a proper appeal directed to the Board, the Hearing Officer should reject Complainants' Motion to Strike as improper, untimely (because it was not timely submitted to the Board), and violation of the Board Rules. Complainants cannot avoid the Board Rules by fashioning their appeal as a motion to strike when they have long known about the opinion at issue.

IV. MWG's Expert's Methodology Is Standard

Notwithstanding that Complainants have waived any objection to MWG's expert's constituent comparison opinion, Mr. Seymour's methodology is standard and admissible under Illinois law and the Board's admissibility standards. Mr. Seymour has the skill, expertise and specialized knowledge that will assist the Board to understand the evidence and determine whether the coal ash at the MWG stations are a source. Mr. Seymour specifically testified that comparing constituents is standard in his field, and thus is admissible as expert opinion. PCB13-15 Hearing

Transcript, Feb. 1, 2018 Hearing Transcript, pp. 282:12-13, Ill. R. Evid. 702. As Mr. Seymour's methodology is standard, it is neither new nor novel, and the analysis under *Frye* does not apply. *People v. Simons,* 213 Ill. 2d 523, 530, 821 N.E.2d 1184, 1189 (2004), *citing, Donaldson v. Central Illinois Public Service Co.*, 199 Ill. 2d 63, 78-79, 767 N.E.2d 314 (2002).

Under Rule 702 of the Illinois Rules of Evidence, if "scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise." Ill. R. Evid. 702. Only when the methodology is "new or novel" does the proponent of the opinion have to show that it is generally accepted in its field under the *Frye* test. Ill. R. Evid. 702, *People v. Simons (In re Simons),* 213 Ill. 2d 523, 530, 290 Ill. Dec. 610, 615, 821 N.E.2d 1184, 1189 (2004) (Illinois Supreme Court noted that "Significantly, the Frye test applies only to "new" or "novel" scientific methodologies"). In *People v. Simons,* the Illinois Supreme Court stated that a scientific methodology was "new" or "novel" if it "is 'original or striking' or "does not resemble something formerly known or used." *People v. Simons,* 213 Ill. 2d at 530, *citing Donaldson v. Cent. Ill. Pub. Serv. Co.,* 199 Ill. 2d 63, 79 *quoting* Webster's Third New International Dictionary 1546 (1993). In other words, Rule 702 is a two part analysis. First, a determination whether it is a standard or common methodology. If it is not a common methodology, then the *Frye* test is applied. Ill. R. Evid. 702.

Notably, Complainants have not identified any Board or Hearing Officer's Order excluding an expert opinion or testimony because it did not pass the *Frye* test. The absence of any applicable Board decisions is likely because the admission of evidence under the Board Rules, is a "relaxed standard," and an expert's testimony and opinion will assist the Board to determine the facts at

issue. 35 Ill. Adm. Code 101.626, Ill. R. Evid. 702, *People v. Atkinson Landfill Co.*, PCB No. 13-28, slip op. at 9 (Jan. 9, 2014).

In other matters before the Board, the Board has allowed experts to issue opinions comparing source constituents to the constituents in water. In *Harold Craig and Robert Craig v. The Pollution Control Board,* 59 Ill.App.3d 65 (4th Dist. 1978), the Craigs' expert analyzed the bacteria in the manure from their farm, and compared the bacteria found at the area of the fish kill. *Id*. The expert showed that a majority of the bacteria at the point the farm manure entered the water was from animal waste, but a majority of the bacteria at the location of the dead fish was from human waste and was not a match. *Id* at 68. In *People ex rel. Ryan v. Agpro, Inc.*, the State of Illinois's expert witness, an Illinois EPA geologist, compared the pesticides in the soil samples on the defendant's property to the pesticides found in the water in the private wells close to or next to the defendant's property. *People ex rel. Ryan v. Agpro, Inc.*, 345 Ill. App. 1011, 1017, 803 N.E.2d 1007, 1010 (2nd Dist. 2004).

Comparing constituents from a potential source to the constituents found in another location is axiomatic and routinely conducted by scientists. As Mr. Seymour stated during the hearing: "Having reviewed a number of sites, we all do data comparisons…" PCB13-15 Hearing Transcript, Feb. 1, 2018, p. 282, ln. 12-13. Mr. Seymour repeated that his analysis was a standard practice on Feb. 2, 2018: "I do groundwater comparisons that match before and it's a common tool and we use it in these comparisons at all my sites." PCB13-15 Hearing Transcript, Feb. 2, 2018, p. 278:8-10. In fact, Complainants' own expert also conducted a comparison of constituents from source to groundwater in his report. Complainants Ex. 401. In Complainants' expert's report, he regularly stated that he compared and matched the constituents in groundwater to the leachate characteristics of coal ash. For example, on page two of his report he stated: "At all of the power plant sites, the

concentrations of B, Mn, and SO4 **measured in groundwater match the leachate characteristics of coal ash**." Complainants Ex. 401, p. 2. Complainants' expert repeated that assertion throughout his report. Complainants Ex. 401, pp. 12, 18, 25, 32, and 35 (emphasis added). The comparison of constituents is neither new nor novel.

As Mr. Seymour explained during the hearing, he routinely conducts data comparisons and the results of the comparison can be presented in different ways. PCB13-15 Hearing Transcript, Feb. 1, 2018, pp. 283:12-14.) For his expert report in this case, Mr. Seymour "…simply put it in a percentage of matching or non-matching." PCB13-15 Hearing Transcript, Feb. 1, 2018, pp. 282:14-15. He explained his reasoning that "…it seemed like a simple way to present it that people could understand whether it matched or did not match, was it consistent or was it inconsistent." PCB13-15 Hearing Transcript, Feb. 1, 2018, pp. 282:22-24. Mr. Seymour again confirmed that the constituent comparison process was standard in his field. PCB13-15 Hearing Transcript, Feb. 1, 2018, pp. 283:1-3. Mr. Seymour repeatedly explained his point to Complainants during cross-examination, that groundwater comparisons and matching was a common tool used at all his sites, and that the presentation in this report was in percentage form in an effort to simplify his presentation. PCB13-15 Hearing Transcript, Feb. 2, 2018, p. 278:8-16. Simply because Mr. Seymour presented the results of his constituent comparison in mathematical percentages does not mean that the methodology is novel or new. The basic methodology of comparing data is well established. *See* Complainants' Expert Report, Ex. 401, pp. 2, 12, 18, 25, 32, and 35. Because Mr. Seymour's analysis is neither new nor novel, Complainants' claims based upon the *Frye* standard are invalid.

V. Complainants' Arguments Only Go to Weight and Not Admissibility

Assuming the Hearing Officer is able to get past the issue of waiver, the improper and untimely attempt to appeal, and the issue that Mr. Seymour's methodology is standard and the same as

Complainants' own expert, Complainants' arguments about reliability of Mr. Seymour's comparison analysis only go to the weight of the opinion, not to its admissibility. *See*, PCB13-15 Hearing Transcript, Oct. 27, 2017, p. 53:16:21, Oct. 23, 2017, p. 104:15:18, Oct. 24, 2017, p. 111:5-11, Oct. 25, 2017, p. 62:15-18 and 185:2-6, Jan. 30, 2018, p. 67:14:18. Again, had Complainants' timely stated their objections before the hearing, or even during the hearing, MWG could have elicited additional testimony to resolve the objections. By filing a post-hearing Motion to Strike with no prior objections, Complainants rob MWG of the ability to timely resolve the evidentiary questions at the hearing. *People v. Carlson*, 79 Ill. 2d at 576. Accordingly, under the broad Board Rules on admissibility, the Hearing Officer should deny Complainants' Motion to Strike.

WHEREFORE, for the reasons stated above MWG requests that the Hearing Officer deny Complainants' Motion.

Respectfully submitted,
Midwest Generation, LLC

By: /s/ Jennifer T. Nijman
One of Its Attorneys

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EXHIBIT 1

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

In the Matter of:

SIERRA CLUB, ENVIRONMENTAL LAW AND POLICY CENTER, PRAIRIE RIVERS NETWORK, and CITIZENS AGAINST RUINING THE ENVIRONMENT,	)	
	)	PCB No-2013-015
Complainants,	)	(Enforcement - Water)
v.	)	
MIDWEST GENERATION, LLC,	)	
Respondents.	)	

The discovery deposition of JOHN PATRICK SEYMOUR, P.E., taken under oath on the 1st day of March 2016, at 353 North Clark Street, 45th Floor, Chicago, Illinois, pursuant to the Rules of the Supreme Court of Illinois and the Code of Civil Procedure, before Brad Benjamin, a certified shorthand reporter in and for the State of Illinois, pursuant to notice.

MS. CASSEL: We can go on the record.

BY MS. CASSEL:

Q Okay, sir. I would like to turn to page 42 of your report, please, Deposition Exhibit 2.

So this is Section 5.5.2, the matching analysis that you did in this report and -- as well as in Tables 5-4 and 5-5.

And, so the record is clear, we're discussing the matching analysis in this initial report since I only received the supplement to that yesterday, and we're not prepared ask you questions about it other than a single question just to understand what was done.

So we will focus on this report and those -- the tables in the initial report?

MS. NIJMAN: Okay. Then let me just state for the record, though, depending upon on your questions -- it was a mathematical error that was corrected. So if you're going to ask him about his document, these pages have been supplemented.

MS. CASSEL: Well, I don't know enough about what was supplemented until I ask him.

MS. NIJMAN: Sure.

MS. CASSEL: So I'm going to focus on this and,

you know, I'll assume his answers based are on this unless he tells me otherwise.

MS. NIJMAN: So you'll have to clarify --

THE WITNESS: We'll take each question as it comes --

MS. CASSEL: Perfect.

THE WITNESS: -- and decide.

BY MS. CASSEL:

Q Okay. So you state on page 42 -- let's see if I can find it -- quote, Conceptually -- this is the second sentence of the paragraph under 5-5- -- or -- excuse me -- 5.5.2, page 42.

A Excuse me. Pardon me. I'm going to look for my supplement just in case I want to check something.

Go ahead. I'm sorry.

Q So you state on page 42, "Conceptually, if all the constituents detected in groundwater samples from a monitoring well match the constituents detected in leachate from ash currently stored in ponds, and if constituents not detected in groundwater samples match the constituents not detected in leachate from ash currently stored in ponds, then it would be probable that leachate from

ash currently stored in ponds is impacting groundwater."

Do you see where you state that?

A Yes.

Q What do you mean by "match"?

A Well, what we've done, in general -- because I know that you haven't seen the supplement -- but, in general, we're looking to see what you can find in the groundwater that's common to the pond or what's found in the groundwater that's inconsistent with what's in the pond. So if you look at both matching and non-matching data.

Q So what is -- if a pollutant is detected in both the groundwater and the leachate, then that's a match?

A Yes.

Q And if it's not detected in groundwater and not detected in leachate, that's a match?

A Well, that's one of the things that in the supplement you'll notice that we've changed because it came to us that by including that number in the denominator, it was calculating a number that we didn't think was representative of a matching versus non-matching analysis.

Q So what is the diff- -- so please explain to me what the difference is.

So is it not a match if the constituent is not found in the leachate and not found in the groundwater?

A Yes, because we felt that you could add a series of elements or compounds that didn't exist in the ash and didn't exist in the groundwater, and theoretically that number keeps getting less and less representative, so we took that data out.

Q But they are both in, then they are both a match?

A If they're both in and they both -- then they match.

Q When a pollutant is below detection, does that mean that there is none of it in the sample tested?

A In which media are you talking when you say there's a pollutant detected?

Q In any media. We can say the groundwater.

If there's a pollutant -- if a pollutant is below detection in groundwater, does that mean there is none of it in the groundwater?

A Well, by definition, if it's not detected,

we're not including it.

Q But that's not my question, as to whether you're including it.

I'm asking you, is there none of it in the groundwater if it's below detection.

MS. NIJMAN: Object to vagueness.

THE WITNESS: Again, the -- the sci- -- I'm sorry.

MS. NIJMAN: Go ahead.

THE WITNESS: The science is that if you don't detect it, you assume it's not there.

BY MS. CASSEL:

Q And is that what you did?

A Correct.

Q Okay. If you ran a test on the same groundwater that had a lower detection threshold and the concentration of a pollutant was found to be detectable under that test, but it was not found -- it was below detection in another test with a higher detection threshold -- what am I trying to say? The pollutant is, in fact, present in that groundwater in that case; is that correct?

MS. NIJMAN: Object to form. Compound.

THE WITNESS: The practice that we follow is

Q This is for the groundwater?
A For the groundwater.
Q This is not for the leachate?
A Not for the leachate.
Q Okay. So let's look at the data for the wells, just to see what it actually was.
MS. CASSEL: Can you hand me the next exhibit.
MS. DUBIN: 56445?
MS. CASSEL: Yes.
That's part of this whole thing, right?
MS. DUBIN: Yes.
MS. CASSEL: Okay. Can you mark this exhibit, please.
(Seymour Deposition Exhibit No. 9 was marked for identification.)
BY MS. CASSEL:
Q So you have been handed what's been marked as Deposition Exhibit No. 9 -- Seymour Deposition Exhibit No. 9.
A Uh-huh. Okay.
Q Do you recognize this document?
A I recognize it as a Groundwater Quarterly

Monitoring Report, Waukegan Station, and it is labeled as the Fourth Quarter, 2015.

Q So let's take a look -- it says, "Annual and Quarterly Groundwater Monitoring Results - Fourth Quarter, 2015," right?

A Yes.

Q Okay. Just to make sure.

So let's look at Bates page 56445.

A Jenny, recognize, please, that this is 2015 data. This analysis is based on 2014 data.

Q It's fourth quarter, 2015. Okay.

I believe this data does have the 2014 concentrations in it, so we can look at those.

If you would look at 56445.

A Okay.

Q So the arsenic concentrations in Monitoring Well 2, as an example, in 2014 were .0085, .0062, .0081, and .0095.

I believe that's milligrams per liter; is that correct?

A Yes.

Q So in the groundwater -- there was arsenic in that groundwater in 2014, correct?

A Yes.

question.

MS. NIJMAN: -- a hypothetical that you're giving?

MS. CASSEL: No.

BY MS. CASSEL:

Q Well, would this amount of arsenic that's shown in the 2014 groundwater data for Monitoring Well 2, would that amount of data show up in the leachate test?

A If you had results, for example -- looking for arsenic -- August 21st, 2014, the concentration is .0081, and that would be below the leachate test detection level.

Q And are all of the results for 2014 for arsenic in Monitoring Well 2 below the leachate test detection levels?

A They appear to be.

Q Okay. But the leachate could, in fact, have that same concentration of arsenic in it, correct?

A I think earlier the question that was asked that the arsenic could be in the leachate sample up to the detection level of the leachate test, which is .05.

Q So, "yes"?
A So the answer would be "yes."
Q Yet -- so essentially you could have the same concentration of arsenic, this concentration that's shown in the groundwater levels for 2014, in the leachate, but under your analysis that would not match; is that correct?
A Correct.
Q And the detection limit for groundwater, just to be clear, in 2014 for Monitoring Well 2 was .001 milligrams per liter, right?
A For the monitoring groundwater sample --
Q For the groundwater sample.
A -- .001, yes.
Q Thank you.
Let's consider antimony, just as another point of comparison. If we look at Table 5-4 of your report --
A For Waukegan?
Q For Waukegan also.
A Okay.
Q And this is looking at the -- 5-4 -- detected -- and here, we have a different list of constituents as being indicators of leachate.

Why is there a different list in this table?

A This list is based upon the EPRI leachate data.

Q So here we show in Table 5-4 of your report -- we show antimony as being in that leachate, correct? Because it was only an indicator if it was in it --

A Yes.

Q -- is that right?

But it's not present in the groundwater samples for any of the wells; is that correct?

A Yes.

Q Let's see how much antimony was detected in the leachate data. So if we can look at 5-2, Table 5-2, page 1 of that table.

A Page 1.

Q Page 1 of Table 5-2, the first page of that table.

A Okay.

Q So is it correct that the concentrations of antimony in leachate for sub-bituminous coal range between .00024 and .00062 milligrams per liter?

A In the impoundment for sub-bituminous coal, antimony was found at those levels in parts per million.

Q Okay. So that is less than .001 milligrams per liter, correct?

A Yes.

Q Now, let's compare how much antimony was detected in the groundwater.

If you would look back at the same monitoring data, page 56445 --

A I've got it.

Q -- from Monitoring Well 2. We have a non-detect, right, for antimony for each of those dates in 2014?

A Yes.

Q And the detection level of that is .0030, correct?

A Yes.

Q So with the concentrations of antimony that were found in the EPRI leachate data, up to .00062 milligrams per liter, would that amount of antimony be detectible in groundwater using this detection limit?

A It does not look like it would be.

Q So even if the groundwater had the same amount of antimony as the leachate, your matching analysis would not show a match in this circumstance, correct?

A What I would say is that if it was a detection level of .003 for groundwater, that --

THE WITNESS: I'm sorry. I shouldn't answer a question not asked.

Can you read the question again.

(The last question was read by the reporter.)

THE WITNESS: Correct. It would not match.

BY MS. CASSEL:

Q Okay. Have you used this same matching analysis before, matching the constituents in -- all constituents found in leachate to all constituents found in groundwater?

A For coal ash?

Q For coal ash.

A I have not.

Q Have you used it for other types of sources?

A No, I have not.

Q Do you know of any other projects in which

EXHIBIT B

POLITICO

Corbis

The Agenda
FUTURE OF POWER

Inside the war on coal

How Mike Bloomberg, red-state businesses, and a lot of Midwestern lawyers are changing American energy faster than you think.

By MICHAEL GRUNWALD | 05/26/2015 11:45 PM EDT

The war on coal is not just political rhetoric, or a paranoid fantasy concocted by rapacious polluters. It's real and it's relentless. Over the past five years, it has killed a coal-fired power plant every 10 days. It has quietly transformed the U.S. electric grid and the global climate debate.

The industry and its supporters use "war on coal" as shorthand for a ferocious assault by a hostile White House, but the real war on coal is not primarily an Obama war, or even a Washington war. It's a guerrilla war. The front lines are not at the Environmental Protection Agency or the Supreme Court. If you want to see how the fossil fuel that once powered most of the country is being battered by enemy forces, you have to watch state and local hearings where utility commissions and other obscure governing bodies debate individual coal plants. You probably won't find much drama. You'll definitely find lawyers from the Sierra Club's Beyond Coal campaign, the boots on the ground in the war on coal.

Beyond Coal is the most extensive, expensive and effective campaign in the Club's 123-year history, and maybe the history of the environmental movement. It's gone largely unnoticed amid the furor over the Keystone pipeline and President Barack Obama's efforts to regulate carbon, but it's helped retire more than one third of America's coal plants since its launch in 2010, one dull hearing at a time. With a vast war chest donated by Michael Bloomberg, unlikely allies from the business world, and a strategy that relies more on economics than ecology, its team of nearly 200 litigators and organizers has won battles in the Midwestern and Appalachian coal belts, in the reddest of red states, in almost every state that burns coal.

"They're sophisticated, they're very active, and they're better funded than we are," says Mike Duncan, a former Republican National Committee chairman who now heads the industry-backed American Coalition for Clean Coal Electricity. "I don't like what they're doing; we're losing a lot of coal in this country. But they do show up."

Coal still helps keep our lights on, generating nearly 40 percent of U.S. power. But it generated more than 50 percent just over a decade ago, and the big question now is how

rapidly its decline will continue. Almost every watt of new generating capacity is coming from natural gas, wind or solar; the coal industry now employs fewer workers than the solar industry, which barely existed in 2010. Utilities no longer even bother to propose new coal plants to replace the old ones they retire. Coal industry stocks are tanking, and analysts are predicting a new wave of coal bankruptcies.

This is a big deal, because coal is America's top source of greenhouse gases, and coal retirements are the main reason U.S. carbon emissions have declined 10 percent in a decade. Coal is also America's top source of mercury, sulfur dioxide and other toxic air pollutants, so fewer coal plants also means less asthma and lung disease—not to mention fewer coal-ash spills and coal-mining disasters. The shift toward cleaner-burning gas and zero-emissions renewables is the most important change in our electricity mix in decades, and while Obama has been an ally in the war on coal—not always as aggressive an ally as the industry claims—the Sierra Club is in the trenches. The U.S. had 523 coal-fired power plants when Beyond Coal began targeting them; just last week, it celebrated the 190th retirement of its campaign in Asheville, N.C., culminating a three-year fight that had been featured in the climate documentary "Years of Living Dangerously."

Beyond Coal isn't the stereotypical Sierra Club campaign, tree-huggers shouting save-the-Earth slogans. Yes, it sometimes deploys its 2.4 million-member, grass-roots army to shutter plants with traditional not-in-my-back-yard organizing and right-to-breathe agitating. But it usually wins by arguing that ditching coal will save ratepayers money.

Behind that argument lies a revolution in the economics of power, changes few Americans think about when they flick their switches. Coal used to be the cheapest form of electricity by far, but it's gotten pricier as it's been forced to clean up more of its mess, while the costs of gas, wind and solar have plunged in recent years. Now retrofitting old coal plants with the pollution controls needed to comply with Obama's limits on soot, sulfur and mercury is becoming cost-prohibitive—and the EPA is finalizing its new carbon rules as well as tougher ozone restrictions that should add to the burden. That's why the Sierra Club finds itself in foxholes with big-box stores, manufacturers and other business interests, fighting coal upgrades that would jack up electricity bills, pushing for cheaper renewables and energy efficiency instead. In a case I watched in Oklahoma City, every stakeholder supported Beyond Coal's push for a utility to buy more low-cost wind power—including a coalition of industrial customers that reportedly included a Koch Industries-owned paper mill.

"They're not burning bras. They're fighting dollar to dollar," says attorney Jim Roth, who represented a group of hospitals on Beyond Coal's side in the Oklahoma case. "They've become masters at bringing financial arguments to environmental questions."

As the affordability case for coal has lost traction, the industry's defenders have portrayed the war on coal as a war on reliability, an assault on 24-hour "baseload" plants that provide juice when the sun isn't shining and the wind isn't blowing. They ask how the Sierra Club expects America to run its refrigerators around the clock—since it also opposes nuclear power and has a separate Beyond Gas campaign. Duncan's group started a Twitter meme warning that Americans could end up #ColdInTheDark, and even Bloomberg suggested to me in a recent interview that the Club's leaders seem to want Americans to wear loincloths and live in caves.

In fact, neither the decline of coal, nor the boom in renewables has blacked out the grid, and Beyond Coal's leaders are confident electricity markets can handle much more intermittent power. In any case, they see coal as the lowest-hanging fruit in the struggle to stabilize the climate, not only our dirtiest fossil fuel but the one with the cheapest alternatives. In the long run, combating global warming will depend on a multitude of factors, from electric vehicles to carbon releases from deforestation to methane releases from belching cows, but for the next decade, our climate progress depends mostly on reducing our reliance on the black stuff. Coal retirements have enabled Obama to pledge U.S. emissions cuts of up to 28 percent by 2025, which has, in turn, enabled him to strike a climate deal with China and pursue a global deal later this year in Paris.

"We've found the secret sauce to making progress in unlikely places," says Bruce Nilles, who leads Beyond Coal from the Club's San Francisco headquarters. "And every time we beat the coal boys, people say: 'Whoa. It can be done.'"

The Sierra Club can't claim full credit for the coal bust. It didn't ratchet down the prices of gas, wind and solar or enact the flurry of EPA rules ratcheting up the price of coal, although its lobbyists and lawyers have pushed hard for government support for renewables while fighting in court over just about every coal-related regulation. It didn't produce the energy efficiency boom that has reined in electricity demand, either. Still, a Bloomberg Philanthropies analysis found that at least 40 percent of U.S. coal retirements could not have happened without Beyond Coal's advocacy. The status quo wields a lot of power in the heavily regulated power sector, where economics and mathematics don't always beat politics and inertia. The case for change keeps getting stronger, but someone has to make the case.

When Mary Anne Hitt, Beyond Coal's national director, first visited Indianapolis to fight an inner-city plant, the headline in the Star was: "Beyond Coal's Director Faces Tough Sell in Indiana." But after two years of door-knocking, phone-banking and educating officials on the new realities of electricity, the Sierra Club and its local partners helped shut down the plant. Hitt has seen the same kind of miracle in Chicago, in Omaha, alongside a Paiute tribe reservation in Nevada, even in coal strongholds like Kentucky. It's starting to feel more like a pattern than a miracle.

"David is fighting Goliath every day, and David keeps winning," Hitt says.

Energy analysts have a way of making Goliath's new underdog status seem inevitable. Then again, it wasn't long ago that their burning question about the U.S. coal industry was not how fast it would go away, but how fast it would grow.

The story of coal is a rich vein in the American story, powering our industry, our railroads, our politics. For decades, the work of extracting coal after millions of years underground—so dangerous for some, so lucrative for others—was seen as God's work. The alchemy of converting coal into valuable energy was seen as a fulfillment of America's destiny to exploit nature for the benefit of mankind, even as the smog spewing out of coal smokestacks was seen as part of the dystopia of urban life.

These days, growing concerns about climate have heightened concerns about coal, which produces 75 percent of the power sector's carbon, and more emissions than all our cars and trucks combined. But even at the dawn of the 21st century, the George W. Bush administration's main concern about coal power and fossil energy in general was that the U.S. wasn't producing enough of it. In 2001, an energy task force led by Dick Cheney, after a series of secret meetings with fossil-fuel executives, called for a new power-plant construction boom, warning that the alternative was a national reprise of the rolling blackouts that had just roiled California. Utilities quickly proposed about 200 new coal plants, and faced no organized national opposition. Coal plants have a useful lifespan of at least 40 years, so the U.S. was poised to lock in a new generation of dirty power. And all that new capacity was poised to destroy any incentive to develop clean wind or solar power.

That's when the Sierra Club got into its first big coal fight over a proposed billion-dollar plant south of Chicago, a welcome-to-the-NFL episode. The Chicago area already had poor air quality—the coal plants around the Loop were known as the Ring of Fire—and local volunteers, led by an indefatigable German immigrant named Verena Owen, were desperate to block the project. Their cause seemed hopeless, but for Owen, who is now Beyond Coal's lead volunteer, it was personal. Her best friend had struggled to breathe

whenever the air was hazy and eventually died of lung disease, leaving behind a daughter in kindergarten. “I don’t know how many people we ended up saving, but I know one we didn’t,” Owen says.

The first time Nilles, at the time a lawyer for the Sierra Club’s Midwest office in Chicago, tried to attend a hearing about the plant, union members who supported the project came early and packed the hall while the Club was holding a news conference. Illinois regulators soon rubber-stamped the permit. Owen and Nilles can still recite the date and time of the news dump: Friday, Oct. 10, 2003, at 5:10 p.m., so the bureaucrats could ignore their calls and escape for the weekend. And the industry had an even easier time of it elsewhere. Nilles later reviewed the record for another billion-dollar plant that broke ground in Iowa about the same time, and discovered there hadn’t been a single public comment in opposition.

“Everything was going full speed in the wrong direction, and we had no capacity to fight,” he says. “We realized we needed a strategy. Fast.”

The strategy that Nilles devised was to fight every new plant from every conceivable environmental, economic and political angle. The Sierra Club began organizing boot camps to teach lawyers and volunteers around the region how to block coal permits. Demand for the seminars was so intense that, at one point, Nilles’ boss had to remind him that Texas was not part of the Midwest. But he figured Texans who breathed air and drank water had as much to lose from exposure to coal-fired pollutants as Midwesterners had. Some of the Club’s funders thought his fight-everything-everywhere approach was unrealistic during a national coal rush, but every proposed plant was in someone’s backyard, and the Club had members in every corner of the country. Nilles couldn’t imagine telling any of them their communities would have to be sacrificed for the greater tactical good.

Environmentalists have always been good at blocking stuff, and over the next few years, the kitchen-sink strategy produced some improbable victories. Nilles exploited threats to an endangered clover to delay the Chicago-area plant, and the utility eventually abandoned it. A local Sierra Club chapter stopped a massive plant in Kentucky coal country after a 63-day hearing, convincing regulators that the proposal had inadequate pollution controls, and that adequate controls would be exorbitant for ratepayers. These were shoestring crusades with expert witnesses crashing on the couches of volunteers, but the victories felt contagious, spreading hope to activists in other states who read about them on the Club’s coal listserv.

Meanwhile, the Sierra Club was canvassing its members to develop a new long-term strategic plan. To the surprise of then-Director Carl Pope, they overwhelmingly wanted climate and energy to be the top priority, a major shift for a group that had emphasized wilderness conservation since its creation by the legendary outdoorsman John Muir. At a meeting in Tucson in early 2006, the Club's board voted to build the fledgling Midwestern anti-coal effort into a national campaign. Climate activists are often accused of wasting energy on symbolic movement-building efforts with relatively limited impact on emissions, like their crusades to stop Keystone and get universities to divest from fossil fuels. Beyond Coal's leaders do oppose the pipeline and support the divestment movement, but the rationale for the campaign was all about hunting where the ducks are.

"It was existential necessity: Look how many coal plants they want to build. Look how much carbon they'd produce. Well, it's game over if we don't stop them," Pope recalls. "If we were going to focus on climate, we had to focus on coal."

In a bow to political realism, the initial goal was to make sure coal was "mined responsibly, burned cleanly and disposed of safely." But the campaigners didn't really believe coal could be burned cleanly. The original mouthful of a mission soon evolved to "Move Beyond Coal," then just "Beyond Coal." It was a much simpler message, helping to unite a variety of activists—working for specific neighborhoods, Indian tribes, mountains targeted by mining outfits, public health, environmental justice, clean energy, and the climate—against a common enemy. The Sierra Club would be the one constant presence in the war on coal, but it began partnering with more than 100 local, regional and national groups in its battles around the country.

The campaign was remarkably successful. Nilles and his team scoured every permit application for vulnerabilities and managed to block all but 30 of the 200 plants proposed in the Bush era. The nice thing about fighting new plants was that they didn't exist yet, so it only took one deal breaker—too much smog in a high-smog area, too close to a national park, too expensive for ratepayers, whatever—to break a deal. Some of the plants that did get built still haunt Nilles, but those defeats did not doom the decarbonization of America. The game was not over.

By 2008, with the economy crashing and power demand slumping, utilities had stopped pushing new coal plants. That's when Nilles began plotting to go after old ones—an even tougher challenge, but a vital one to avoid the game-over scenario. He had moved to the liberal college town of Madison, and he was amazed that an old coal plant a mile from his home still had no pollution controls; it was way dirtier than the new plants he was fighting around the country. The nation's fleet of existing coal plants was still emitting nearly 2

billion tons of carbon and causing an estimated 13,000 premature deaths every year. It felt good to stop projects that would have increased those numbers, but Nilles wanted to use the Club's newfound expertise to reduce them.

"It's a lot easier to throw ourselves in front of bulldozers to stop something than it is to shut something down that's already part of the community, paying taxes, generating power, providing jobs," Nilles says. "But that's where the emissions are."

That was also the year Obama won the presidency, creating hope for stricter EPA regulation of sulfur, soot and ozone, plus the first-ever regulations of mercury, coal ash and carbon. As difficult as it would be to kill plants that had been operating for decades—two-thirds of the coal fleet predated the Clean Air Act of 1970—Nilles thought the combination of top-down rules from Washington and bottom-up pressure at state and local hearings could force utilities to confront investment decisions they had been delaying all those decades. Most utilities would need approval from their financial and environmental regulators before they could install expensive pollution controls. And while the utilities might be happy to charge their customers tens of millions of dollars for upgrades in order to comply with one new rule—plus a tidy profit they're usually guaranteed for capital improvements—utility commissions might not let them start down that road if they faced hundreds of millions of dollars in additional compliance costs from rules still to come.

Once again, the campaign produced some inspiring early wins, including the retirement of that antiquated plant near Nilles in Madison. He also filed a lawsuit against his alma mater, the University of Wisconsin, to get it off coal. The Club quickly found that when it could stop investor-owned utilities from getting a blank check to charge ratepayers for coal upgrades, they would usually shut down the plants rather than risk shareholder dollars. That was even true in coal country, where homeowners, businesses and regulators were just as allergic to pricey upgrades—and utilities were just as reluctant to foot the bill themselves. As Nilles' new deputy, Hitt, a West Virginia activist who had spent years trying to stop mining companies from blowing up mountains in Appalachia, found she could do more to protect the mountains by shutting down the plants that used their coal.

Beyond Coal had grown from three staffers to a 15-state operation, but it still lacked the scale to fight 523 plants all over the country. It needed to get a lot bigger. That's when the combative billionaire who has financed his own wars on guns, tobacco and Big Gulps took an interest in the war on coal.

Beyond Coal's pivotal moment came at a meeting in Gracie Mansion about, of all things, education reform. Michael Bloomberg, the Wall Street savant-turned media mogul-turned

New York City mayor, was looking for a new outlet for his private philanthropy. It quickly became clear that education reform would not be that outlet.

“It was a terrible meeting in every way, and Mike was angry,” recalls his longtime adviser, Kevin Sheekey. “I said: ‘Look, if you don’t like this idea, that’s fine. We’ll bring you another.’ He said: ‘No, I want another now.’”

As it happened, Sheekey had just eaten lunch with Carl Pope, who was starting a $50 million fundraising drive to expand Beyond Coal’s staff to 45 states. The cap-and-trade plan that Obama supported to cut carbon emissions had stalled in Congress, and the carbon tax that Bloomberg supported was going nowhere as well. Washington was gridlocked. But Pope had explained to Sheekey that shutting down coal plants at the state and local level could do even more for the climate—and have a huge impact on public health issues close to his boss’s heart.

“That’s a good idea,” Bloomberg told Sheekey. “We’ll just give Carl a check for the $50 million. Tell him to stop fundraising and get to work.”

Bloomberg had never thought of himself as a Sierra Club kind of guy. But he saw coal as a killer, as well as the main threat to the climate, and the Club was in the field doing something about it. His only demand was a more analytical approach to the war on coal, with measurable deliverables, complex predictive models for vulnerable plants, and KPI—Key Performance Indicators, as Pope later learned.

“The Sierra Club had never heard of KPI,” Pope says. “We just had a gut instinct for what would work. The mayor said: ‘Oh, no, no. This will be data-driven.’”

On a sweltering day in July 2011, Bloomberg announced his gift to the Club on a boat he had chartered on the Potomac River, in front of a 63-year-old coal plant he had always noticed on flights into Washington. He saw it as a perfect illustration of the city’s inability to get anything done.

“You’d think the politicians would at least care about the air they breathe themselves!” Bloomberg marveled to me in a recent interview.

That plant on the Potomac is now closed. So is the Massachusetts plant that Mitt Romney once said “kills people,” a line Obama actually used against him in coal-state campaign ads in 2012. So are all of Chicago’s plants, as Mayor Rahm Emanuel boasted in his first campaign ad in 2015. Overall, the 190 plants that U.S. utilities have agreed to retire will eliminate about one fourth of America’s coal-fired capacity, a total of 79 gigawatts. And for

every watt of coal capacity they're taking out of commission, they've already installed a watt of wind or solar capacity. The Clean Air Task Force estimate of coal-fired premature deaths is down to about 7,500 a year, a decrease of 5,500 since Beyond Coal went national. And Bloomberg's early support has helped attract more than $100 million from top foundations and wealthy individuals like the Silicon Valley billionaire Tom Steyer, the climate movement's top political donor.

"It's a reminder that you can do a lot with no help from Congress," Bloomberg says. "I just wish we could point out the specific people who were saved."

To coal backers, Beyond Coal is pure urban elitist lunacy, the kind of nightmare you get when a nanny-state mayor from New York hooks up with eco-radicals from San Francisco and a liberal president in Washington. Republican Senator James Inhofe of Oklahoma—chairman of the Environment and Public Works Committee, author of "The Greatest Hoax," thrower of a Senate-floor snowball designed to highlight the folly of global-warming alarmism—told me it's hard to believe some Americans actually want to keep our abundant energy resources in the ground.

"It's a war on all fossil fuels, and coal is the No. 1 target," Inhofe says. "You got a president who doesn't care how many jobs it costs, and rich people who don't care how much money they spend. They can do a lot of damage."

I got to watch the war in Inhofe's state, and the damage wasn't getting done the way Inhofe imagined. The job creators were siding with the environmentalists. Economics was the most powerful weapon in the Sierra Club's arsenal.

At a dry hearing in a drab courtroom in Oklahoma City, a methodical Beyond Coal attorney named Kristin Henry, whose bio identifies her as "one of the few environmentalists who would never be caught wearing Birkenstocks," was pinning down an Oklahoma Gas & Electric executive with a barrage of wouldn't-you-agrees, isn't-it-trues, and would-it-be-fair-to-say's. The power company was out of compliance with a federal air-quality rule called "regional haze," so it was offering to convert one of its two coal plants into a natural gas plant. Henry knew she couldn't stop that. But OG&E also wanted to install massive new scrubbers on the other plant so it could keep burning coal for decades to come. Henry was determined to stop that.

In the 90 minutes Henry spent cross-examining OG&E's Joseph Rowlett in early March, she didn't ask a single question about climate or public health. She focused exclusively on OG&E's request for the largest rate increase in state history, a 15 percent hike to finance the

utility's $700 million compliance plan. Through her deadpan, leading questions, she portrayed OG&E as a company desperate to get its customers to foot the bill to prop up an inefficient plant, pursuing retrofits it would never consider if its own shareholders had to swallow the costs, operating in a dream world where regional haze was coal's only challenge. At one point, she got Rowlett to admit his calculations assumed there would be no additional coal regulations for the next thirty years, even though the EPA intends to finalize at least four new coal regulations this year alone.

"Isn't it true you're assuming zero over the next 30 years?" Henry asked.

Rowlett paused a few seconds. "That's right," he replied.

The Sierra Club, even though it didn't sound much like the Sierra Club, was clearly in hostile political territory. Oklahoma Attorney General Scott Pruitt, a conservative Republican who has spearheaded a national campaign to protect fossil fuels from legal challenges, had joined OG&E in fighting the EPA haze rule all the way to the Supreme Court. Now he was supposed to be representing consumers at the OG&E hearing before the Oklahoma Corporation Commission, but he hadn't even filed a brief about the record rate hike. "That's unheard of," one commission official told me. Pruitt didn't attend the hearing, either—the day it began, he was in Tulsa with Mike Huckabee raising money for his PAC—but one of his deputies who did attend occasionally raised objections when OG&E witnesses were asked uncomfortable questions.

But if the political deck seemed stacked against the Sierra Club, Henry held the economic cards. In Oklahoma, coal imported from Wyoming now costs more per kilowatt hour than the abundant gas under the ground or the wind that famously comes sweeping down the plain. In another recent haze case, the Sierra Club cut a deal requiring Oklahoma's other major utility to phase out its only coal plant and buy 200 megawatts of wind—and the bids came in so low, the utility ended up buying 600 megawatts of wind. That's why Wal-Mart, the hospital group and the coalition of industrial ratepayers all supported Beyond Coal's push for more wind in the OG&E case. Cheap electricity has a way of scrambling political alliances.

Henry and the lawyers for OG&E's corporate customers formed a kind of tag team, taking turns blasting the company for refusing to even study new wind power. They repeatedly pointed out that in-state competitors as well as Florida and New Mexico utilities were buying Oklahoma wind for just 2 cents per kilowatt hour, even cheaper than coal without pollution controls, while OG&E hadn't purchased new wind in four years—even though its ads boasted about its commitment to wind. When its witnesses claimed

their transmission lines were too congested to add new wind, Henry produced internal documents suggesting the congestion could be fixed for about 3 percent of the cost of the new coal scrubbers. As she pointed out, other Oklahoma utilities have much higher percentages of wind power on their systems.

Closing coal plants can sound radical, but Henry framed it for the Republican utility commissioners as the conservative response to EPA rules, avoiding the risk of "stranded" investments in outdated plants that might have to be shut down anyway. The most economical way to meet haze limits, she suggested, would be to stop burning the coal that causes the haze. Al Armendariz, who was Obama's Dallas-based regional EPA administrator and is now Beyond Coal's Austin-based regional representative, says the Club's victories in states like Georgia, Mississippi and Kentucky have helped normalize the idea of abandoning coal in Oklahoma.

"We get respect because of our track record," Armendariz says. "When we say a utility isn't acting prudently, people can't just dismiss us as 'Oh, of course the Sierra Club says that.' They see how we keep winning. They see these big industrial customers agreeing with us. Then they look at the numbers and see we're right."

Still, there's no denying the war on coal is leading America into uncharted territory. The Sierra Club wants to eliminate all coal power by 2030, but what will replace it? Wind and solar, despite their rapid Obama-era growth, still make up just 5 percent of U.S. power capacity. And while technologies to store renewable energy (such as Tesla's newly announced battery packs) are getting cheaper, they're still a rounding error on the grid. Beyond Coal's leaders are content to push cleaner power and let utilities figure out how to deliver it, but as OG&E Vice President Paul Renfrow told me: "That's easy for them to say. We have to keep the lights on."

Inhofe thinks the Sierra Club is simply obsessed with rooting out fossil fuels, citing "the guy who wants to crucify people" as an example of its extremism. He meant Armendariz, who left the EPA after he was caught on tape suggesting that harsh sanctions for law-breaking oil and gas companies could scare others into compliance, just as public crucifixions helped keep the peace in Roman times.

"The Sierra Club wants to stop coal now?" Inhofe asked. "You'll see, they'll be after gas next."

Long-term, he's right. While the Club accepted some donations from natural gas interests under Pope, it is now formally committed to eliminating gas as well as coal by 2030, and it

has helped block new gas plants in cities like Austin and Carlsbad, California. After its victory last week in Asheville, Beyond Coal vowed to keep fighting to overturn Duke Energy's decision to build a new gas plant to replace its 50-year-old coal plant. Even Bloomberg thinks the Club's opposition to the fracking boom that has helped replace so much domestic coal with domestic gas is silly.

That said, Beyond Coal's leaders, including Armendariz, understand that Beyond Gas is more aspirational than practical for now. They deeply prefer renewables to gas, but they almost as deeply prefer gas to coal. In Oklahoma City, Henry grilled OG&E witnesses about why they wanted to spend $500 million on scrubbers for coal boilers that could be retrofitted to burn gas for just $70 million. She shredded the implausible assumptions OG&E had made in its economic models to make scrubbing coal look cheaper than converting to gas, forcing one witness to admit gas prices were already 25 percent lower than his low-cost scenario. I sat in on one friendly lunch the Club's legal team had with lawyers for a Conoco Phillips front group; they all hoped to move OG&E beyond coal, and gas is clearly part of the short-term solution.

"We want to be principled but pragmatic," says Sierra Club Executive Director Michael Brune, who stopped the Club's gas-industry gifts when he took over in 2010. "We've wrestled with this, and there's a definite disagreement with Bloomberg. We don't see gas as an environmental fix. But we acknowledge that we still need some gas."

Coal is different. Bloomberg calls it "a dead man walking." When he made his initial gift to the Sierra Club, the goal was to secure the retirements of one third of the coal fleet by 2015. The Club is only slightly behind schedule, and in April, Bloomberg came to Washington to announce another $30 million donation, with a new goal of retirement announcements for half of the fleet by 2017. "We're doubling down on an incredibly successful strategy," Bloomberg said.

The campaign's leaders believe coal has already passed a tipping point toward oblivion. Coal giants like Alpha Natural Resources, Arch Coal and Walter Energy are struggling to stay afloat. Just last week, in addition to the retirement announcement for the Asheville plant—as well as another for a Milwaukee plant that wasn't official enough for Beyond Coal to count as #191—the insurance giant AXA announced that it will sell off more than $500 million worth of coal investments, the largest financial institution to flee the space to date, while the EPA announced it was closing a loophole that allowed virtually unlimited emissions from malfunctioning coal plants, a response to yet another Sierra Club lawsuit. And the more dirty plants get shut down, the more residents near other dirty plants are asking: Why not ours?

It's hard to change the status quo, no matter how compelling the economic logic. Beyond Coal does not just deploy data. It organizes rallies and petitions and float-ins on kayaks; it shames utility executives on billboards and airplane banners; it mobilizes its members to show up at boring hearings where showing up can make a difference. If the Oklahoma City case displayed the war on coal as a numerical dispute, another hearing I watched south of Detroit was more like a street fight.

River Rouge is a depressed community at the city's edge, a blightscape of boarded-up bungalows, overgrown lots and pawn shops. There's no grocery store and virtually no medical services, but there is a nice little park where kids play at the playground and adults fish in the Detroit River. Unfortunately, the park smells like rotten eggs, thanks to sulfur dioxide from a DTE Energy coal plant overlooking the playground. Michigan health officials have called this area "the epicenter of the state's asthma burden." The fish aren't safe to eat, either, though people eat them.

"It's just an unhealthy situation," says Alisha Winters, a local resident and mother of seven children, two with asthma. "They figure they can get away with dumping on us."

The EPA has called out this area's elevated sulfur dioxide levels, and last year Republican Governor Rick Snyder's administration floated a compliance plan that would have required DTE to upgrade the coal-fired River Rouge Power Plant or (more likely) close it. But DTE proposed an alternative plan with no costly upgrades, and the state quietly accepted it. The Sierra Club has been mobilizing opposition ever since, drawing an unusual coalition of local whites, African-Americans, Latinos and Arab-Americans—as well as a busload of white liberals from Ann Arbor—for an environmental hearing in mid-March. The hearing had to be moved from City Hall to a school auditorium to accommodate the groundswell of protests, a far cry from that Chicago-area hearing over a decade ago where the Sierra Club got frozen out.

"We're getting people to cross borders, physical and imaginary," says Rhonda Anderson, a sharecropper's daughter who is now an organizer for Beyond Coal.

If the Oklahoma City hearing was financial, the River Rouge hearing was political, a multiracial show of force in "I Love Clean Air" T-shirts. Every speaker opposed the DTE plan, including an Indian-American medical student, an Arab-American law student, an African-American asthma educator, a Latina anti-poverty activist and a white nun. Ebony Elmore, a child care provider who lives a block from the plant, talked about her four siblings and three nieces with asthma, as well as her two parents with pulmonary disease. I happened to ask Democratic Rep. Debbie Dingell, who was watching the testimony from

the side of the hall, why she was there, just as another resident started telling a story about an 11-year-old local girl who died because she couldn't get to her inhaler in time.

"That's why I'm here," Dingell whispered.

A few days later, Governor Snyder—whose top campaign supporters included one Michael Bloomberg—announced a new effort to cut Michigan's reliance on coal. That would have been a huge political burden for Snyder if he had run for president in a GOP primary, where "anti-coal" will be an epithet like "anti-gun" or "anti-freedom," but he decided not to run, and coal is becoming a huge economic burden for his industrial state.

The already frenetic national pace of plant retirements will have to double for Beyond Coal to meet its 2017 goal, but utilities will face daunting investment decisions over the next two years. The EPA recently settled a sulfur lawsuit with the Sierra Club that could replicate the River Rouge dilemma across the nation. The agency has also imposed regional haze plans that already are replicating the Oklahoma dilemma in Arizona, Arkansas and Texas. Today, Beyond Coal has more than 100 legal cases pending over power supply. Meanwhile, it's pursuing a new strategy on the power demand side, pushing blue states like Oregon to stop importing coal-fired electricity, which could shutter plants in red states like Montana. Even inside Texas, the Club has worked with relatively progressive cities like Austin, San Antonio and El Paso to replace their coal power with renewables.

Beyond Coal is also continuing to lobby and litigate in Washington, pushing Obama to drop his "all-of-the-above" approach to energy and formally enlist in the war on coal. Obama has not been as maniacally anti-coal as the industry suggests, punting on ozone rules in his first term to avoid alienating voters in Ohio, issuing relatively weak restrictions on coal ash, taking a lenient approach to mining on public land, floating carbon rules with mild targets for the most coal-reliant states. Still, when you add up all he's done and all he's doing, you get a tremendously uncertain regulatory environment. Senate Majority Leader Mitch McConnell of Kentucky—whose wife, Elaine Chao, recently quit the Bloomberg Philanthropies board over coal—has urged states to defy the Clean Power Plan, but utilities with fiduciary responsibilities don't engage in much civil disobedience. They have already shut down dozens of plants to comply with mercury rules the Supreme Court could still strike down, and they're starting to think about carbon, too.

Some coal advocates still hold out hope that the decline can be reversed if Republicans can win the presidency and keep Congress. "We've got a Congress that's sympathetic, but we've still got a bureaucracy running amok," says Mike Duncan, the RNC chairman-turned-coal

advocate. “That will play in 2016. Obviously, anytime you elect a leader, it’s important to this industry.”

If the EPA stands down under the next president, the pace of retirements could slow. But it probably won’t stop. The trends are too strong. Nilles recently met with leaders of the utility Southern Company, which has slashed its dependence on coal in half over the past five years. Its executives rejected his vision of a coal-free America by 2030, but some of them suggested 2050 could be realistic. In any case, the Sierra Club won a lot of coal fights during the pro-coal Bush administration, because they were ultimately local fights over local air.

The fights also have a global context. The Earth is already getting hotter, and the death of American coal would not avert a climate catastrophe if the rest of the world did not follow our lead. But the decline of American coal emissions will help U.S. negotiators insist that other countries do their part in the global negotiations in Paris. And while critics of climate action often grumble that it would be foolish for the U.S. to make sacrifices when China is still building a new coal plant every week, that’s no longer true. China actually decreased its coal use last year, and is shuttering all four plants in smog-shrouded Beijing. The trends killing coal in America—cheap gas, wind and solar; more energy efficiency; stricter regulations—are trending abroad as well. Cash-strapped U.S. mining firms are desperate to solve their domestic problems by selling more coal in foreign markets, but the Sierra Club has helped lead the fight to block six proposed coal export terminals in the Pacific Northwest, which will help keep even more coal in the ground.

There will be no formal surrender in the war on coal, no battleship treaty to mark the end. But Beyond Coal’s leaders believe they can finish most of their work setting the U.S. electric sector on a greener path over the next five years. The next phase of the war on carbon would be to try to electrify everything else—cars and trains that use oil-derived gasoline and diesel, as well as homes and businesses that rely on natural gas and heating oil. Nilles hopes power companies like OG&E and DTE that Beyond Coal has spent the last decade fighting with—but then cutting deals with—can become allies in Phase Two. And allies will be vital, because if King Coal seems like a rich and powerful enemy, it’s a pushover compared to Big Oil.

“Once we’ve taken out coal, we’ll need to take on oil, and who better to help than our new friends in the utility sector who can make money from electrification?” Nilles says with a grin. “It’s a long fight. This is how we win.”

PHOTO GALLERY

A visual history of coal

Data scientists graphed every word from members of Congress about coal. Here's what they found.

By THE LAZER LAB

Oops, where's solar?

America's leading power sources, in 7 lines