

**UNITED STATES DISTRICT COURT  
CENTRAL DISTRICT OF ILLINOIS  
PEORIA DIVISION**

NATURAL RESOURCES DEFENSE )  
COUNCIL, RESPIRATORY HEALTH )  
ASSOCIATION, and SIERRA CLUB, )  
INC., )

Plaintiffs, )

v. )

ILLINOIS POWER RESOURCES )  
GENERATING, LLC, )

Defendant. )

Case No. 1:13-cv-1181

**ORDER & OPINION**

This matter is before the Court on Defendant’s Motion to Exclude the Testimony of Joel Schwartz (Doc. 183) and Motion to Strike the Declaration of Ian Fisher (Doc. 203) as well as Plaintiffs’ Motion for Leave to Respond to Defendant’s Objection to Consideration of Expert Reports on Summary Judgment (Doc. 221) and requests for oral argument on both cross-motions for summary judgment (Docs. 184 at 2, 198 at 9 n.1). For the reasons discussed below, Defendant’s Motion to Exclude the Testimony of Joel Schwartz (Doc. 183) and Motion to Strike the Declaration of Ian Fisher (Doc. 203) are DENIED. Plaintiffs’ requests for oral argument are DENIED and Plaintiffs’ Motion for Leave to Respond to Defendant’s Objection to Consideration of Expert Reports on Summary Judgment (Doc. 221) is GRANTED. Defendant’s Response to Plaintiffs’ Motion for Leave (Doc. 225) is construed as a sur-response to Plaintiffs’ response (Doc. 221-1).

## BACKGROUND<sup>1</sup>

Defendant is liable for violations of the Clean Air Act with respect to certain opacity exceedances at the Edwards Power Station (“Edwards”) as detailed in this Court’s Order and Opinion on the parties’ cross-motions for summary judgment on liability. (Doc. 124). The parties have now filed cross-motions for partial summary judgment on the potential remedies. (Docs. 180, 184). Plaintiffs requested oral argument on both motions. (Docs. 184 at 2, 198 at 9 n.1). Attendant to its motion for partial summary judgment, Defendant filed a Motion to Exclude the Testimony of Joel Schwartz (Doc. 183) and attendant to its response to Plaintiffs’ motion for partial summary judgment, Defendant filed a Motion to Strike the Declaration of Ian Fisher (Doc. 203). Plaintiffs have sought leave to file a response to Defendant’s reply to Plaintiffs’ Response to Defendant’s motion for partial summary judgment. (Doc. 221). The parties have fully briefed these motions and requests, so the issues in them are ready for determination.

## DISCUSSION

### **I. Defendant’s Motion to Exclude the Testimony of Dr. Joel Schwartz**

Defendant challenges the admission of expert testimony from Dr. Joel Schwartz under *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), and Federal Rule of Evidence 702.<sup>2</sup> (Doc. 183). Dr. Schwartz’s expert report submits

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<sup>1</sup> The facts presented are limited to those pertinent to the determination of the motions ruled on in this Order and Opinion. For a complete factual background, see this Court’s Order and Opinion from August 23, 2016 on the parties’ cross motions for summary judgment (Doc. 124).

<sup>2</sup> Although Rule 702 was revised in 2000, the Seventh Circuit has explained that *Daubert* “remains the gold standard for evaluating the reliability of expert testimony

three primary opinions: “(1) exposure to particulate matter (PM) results in increased death and hospitalization; (2) . . . any amount of exposure [to PM] has substantial adverse impacts on health; and (3) the Edward’s [sic] Plant’s illegal emission of PM have resulted in a quantifiable number of deaths and hospital admissions.” (Doc. 193-2 at 8).<sup>3</sup> The report provides support for these opinions in two ways. First, Dr. Schwartz reviews scientific literature and statements by scientific and governmental organizations responsible for scientific policy. (Doc. 193-2 at 9–73). Second, Dr. Schwartz performs a quantitative risk analysis (“QRA”) to determine the number of deaths and hospitalizations caused by emissions at Edwards during the liability period and estimate the number of deaths and hospitalizations that would be avoided in the future if Edwards installs certain pollution controls. (Doc. 193-2 at 74–80).

In examining a *Daubert* challenge, this Court’s role is to serve as a gatekeeper of expert testimony by ensuring “the principles and methodology reflect reliable scientific practice”—“the key to the gate is not the ultimate correctness of the expert’s conclusions.” *Schultz v. Akzo Nobel Paints, LLC*, 721 F.3d 426, 431 (7th Cir. 2013). Although this is true in a bench trial as in a jury trial, *Kawasaki Kisen Kaisha, Ltd. v. Plano Molding Co.*, 782 F.3d 353, 360 (7th Cir. 2015), the *Daubert* concerns “are of lesser importance” where the case is tried by the Court, because “the primary purpose of the *Daubert* filter is to protect juries from being bamboozled by technical evidence of dubious merit,” *Loeffel Steel Prods., Inc. v. Delta Brands, Inc.*, 372 F. Supp.2d 1104,

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and is essentially codified in the current version of Rule 702.” *Manpower, Inc. v. Ins. Co. of Pa.*, 732 F.3d 796, 806 (7th Cir. 2013).

<sup>3</sup> This Order & Opinion uses “PM” to refer to particulate matter of 2.5 micrograms or less (PM<sub>2.5</sub>) rather than other size categories of PM, such as particulate matter of 10 micrograms or less (PM<sub>10</sub>).

1123 (N.D. Ill. 2005) (citing *SmithKline Beecham Corp. v. Apotext Corp.*, 247 F. Supp.2d. 1011, 1041–42 (N.D. Ill. 2003) (Posner, J., sitting by designation) *aff'd on other grounds*, 403 F.3d 1331 (Fed. Cir. 2005)); *Whitehouse Hotel Ltd. P'ship v. Comm'r*, 615 F.3d 321, 330 (5th Cir. 2010) (“[T]here being no jury [in a bench trial], there is no risk of tainting the trial by exposing a jury to unreliable evidence.”).

The *Daubert* inquiry requires this Court to evaluate three things: “(1) the proffered expert’s *qualifications*; (2) the *reliability* of the expert’s methodology; and (3) the *relevance* of the expert’s testimony.” *Gopalratnam v. Hewlett-Packard Co.*, 877 F.3d 771, 779 (7th Cir. 2017) (emphasis in original). In other words, expert testimony must be presented by a qualified witness, be “grounded in the methods and procedures of science,” and “assist the trier of fact to understand or determine a fact in issue.” *Krik v. Exxon Mobil Corp.*, 870 F.3d 669, 674 (7th Cir. 2017) (quoting *Daubert*, 509 U.S. at 590–91) (alterations omitted). Plaintiffs, as “[t]he part[ies] seeking to introduce the expert witness testimony[,] bear[] the burden of demonstrating that the expert witness testimony satisfies the standard by a preponderance of the evidence.” *Id.* at 673.

Defendant wisely does not challenge Dr. Schwartz’s qualifications. (Doc. 183 at 4). Dr. Schwartz’s uncontested credentials include being the most cited author in the field of air pollution, over 600 peer-reviewed papers on air pollution, numerous memberships, positions, prior advice to the World Health Organization, and testimony before both Congress and other courts. (Doc. 193-2 at 7). The Court finds him qualified. The inquiry becomes whether Dr. Schwartz’s proposed expert testimony is also reliable and relevant.

## A. Reliability

“Rule 702’s reliability elements require the [Court] to determine only that the expert is providing testimony that is based on a correct application of a [valid] methodology and that the expert considered sufficient data to employ the methodology.” *Stollings v. Ryobi Techs., Inc.*, 725 F.3d 753, 766 (7th Cir. 2013). “The focus, therefore, ‘must be solely on principles and methodology, not on the conclusions that they generate.’ ” *Gopalratnam*, 877 F.3d at 781 (quoting *Daubert*, 509 U.S. at 595). Although formalistically separate, in practice “conclusions and methodology are not entirely distinct from one another. Trained experts commonly extrapolate from existing data.” *Manpower, Inc.*, 732 F.3d at 806 (quoting *Gen. Electric Co. v. Joiner*, 522 U.S. 136, 146 (1997)).

The inquiry into reliability is “fact-dependent and flexible.” *Lapsley v. Xtek, Inc.*, 689 F.3d 802, 810 (7th Cir. 2012). *Daubert* set out four factors of reliability for scientific evidence: “whether or not the theory or technique has been (1) tested, (2) subjected to peer review and publication, (3) analyzed for known or potential error rate, and/or is (4) generally accepted within the specific scientific field.” *Id.* (citing *Daubert*, 509 U.S. at 593–94). The Seventh Circuit has recognized six other factors set forth in the 2000 Advisory Committee’s Notes to Rule 702 as relevant to the reliability inquiry:

(5) whether maintenance standards and controls exist; (6) whether the testimony relates to matters growing naturally and directly out of research they have conducted independent of the litigation, or developed expressly for purposes of testifying; (7) whether the expert has unjustifiably extrapolated from an accepted premise to an unfounded conclusion; (8) whether the expert has adequately accounted for obvious alternative explanations; (9) whether the expert is being as careful as he would be in his regular professional work outside his paid litigation

consulting; and (10) whether the field of expertise claimed by the expert is known to reach reliable results for the type of opinion the expert would give.

*Gopalratnam*, 877 F.3d at 779–80 (citations, internal quotation marks, and alterations omitted).<sup>4</sup>

Although lengthy, “this list is neither exhaustive nor mandatory.” *Id.* at 780 (citation omitted). The Seventh Circuit has instructed district courts to “apply these factors flexibly as the case requires.” *Krik*, 870 F.3d at 674. Moreover, an expert need not perform “hands-on testing”; a “ ‘review of experimental, statistical, or other scientific data generated by others in the field’ may suffice as a reasonable methodology upon which to base an opinion.” *Clark v. Takata Corp.*, 192 F.3d 750, 758 (7th Cir. 1999) (quoting *Cummins v. Lyle Indus.*, 93 F.3d 362, 369 (7th Cir. 1996)).

Defendant argues that Dr. Schwartz’s opinions are unreliable because (1) he did not consider the specific type of PM or the regional characteristics of Peoria; (2) his approach differs from that in his peer-reviewed papers; and (3) his conclusion that any amount of PM is harmful is unsupported. (Doc. 183 at 11–12).<sup>5</sup>

### **1. The Type of PM & the Regional Characteristics of Peoria**

It is undisputed that Dr. Schwartz assumes all PM of the same size is equally harmful to human health. To support this assumption, Dr. Schwartz notes that time series studies have shown harm to human health from various different types of PM, including wood smoke, sulfate particles, and traffic particles. (Doc. 193-2 at 46). As

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<sup>4</sup> The Court will refer back to the numbering used here when discussing these factors.

<sup>5</sup> Defendant separately argues that Dr. Schwartz “failed to consider the type of PM” and “there is no basis in science to make the assumption . . . that generic PM is equipotent to coal fly ash PM.” (Doc. 183 at 11–12). The Court will treat these contentions together.

Dr. Schwartz explains, “[i]n the absence of good evidence that any source or type of particle had a *different* impact, the CASAC [Clean Air Science Advisory Committee] recommended . . . treating particles from all sources as having the *same* toxicity.” (Doc. 193-2 at 46) (emphasis in original). Dr. Schwartz presents further inconclusive studies in his rebuttal report to suggest that attempting to differentiate effects by type of PM would not be proper “until better data is developed.” (Doc. 193–7 at 43). Defendant cites to the Declaration of its own expert witness, Dr. Lucy Fraiser, to argue that coal fly ash is less toxic than ordinary PM so it is unreliable to apply generic PM studies to a coal fly ash PM exceedance. (Doc. 183 at 6–8, 12).<sup>6</sup> Additionally, and in a separate section, Defendant argues Dr. Schwartz lacks a scientific basis for the assumption. (Doc. 183 at 14).

It is similarly agreed that Dr. Schwartz assumes a generic concentration-response (C-R) curve based on national data rather than a Peoria-specific C-R curve in his QRA. (Docs. 183 at 12, 193 at 15). As with the type of PM, Plaintiffs urge that the use of a curve generated from national data is justified in the face of inconsistent results from studies attempting to determine region-specific C-R curves. (Doc. 193 at 15; Doc. 193-7 at 43). Defendant argues that this differs from Dr. Schwartz’s peer-reviewed research and that national data is less representative on a local scale. (Doc. 183 at 12). Plaintiffs respond that Dr. Schwartz used the same assumptions used by

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<sup>6</sup> Or so the Court assumes. Defendant cursorily states: “As discussed above, Dr. Schwartz failed to address the type or species of PM emitted by the plant,” presumably referring to section I.A.2 of its motion (Doc. 183 at 6–8, 12). At any rate, the Court cannot consider the differing opinions of dueling experts at the admissibility stage. *Madden v. United States Dep’t of Veterans Affairs*, 873 F.3d 971, 973–74 (7th Cir. 2017).

EPA in performing risk analyses (Doc. 193 at 13–15); anticipating this argument, Defendant argues that EPA’s choices dealing with a scientific gap while making policy decisions do not justify an assumption in evidence presented in a judicial proceeding (Doc. 183 at 14).

The fact that this challenge is about the assumptions made by an expert rather than his methodology dictates the outcome. “The reliability of data and assumptions used in applying a methodology is tested by the adversarial process and determined by the [trier of fact]; the court’s [gatekeeping] role is generally limited to assessing the reliability of the methodology—the framework—of the expert’s analysis.” *Manpower, Inc.*, 732 F.3d at 808; *Gayton v. McCoy*, 593 F.3d 610, 616 (7th Cir. 2010) (“Determinations on admissibility should not supplant the adversarial process; ‘shaky’ expert testimony may be admissible, assailable by its opponents through cross-examination.”). “Accordingly, a district court must admit expert testimony as long as it is based on a reliable methodology. It is then for the [trier of fact] to evaluate the reliability of the underlying data, assumptions, and conclusions.” *In re Urethane Antitrust Litig.*, 768 F.3d 1245, 1263 (10th Cir. 2014) (citing *Manpower, Inc.*, 732 F.3d at 806–08).

That is not to say that an expert’s assumptions can never be so speculative as to warrant exclusion of testimony under Rule 702 and *Daubert*. The Second Circuit has explained that a “trial judge should exclude expert testimony if it is . . . based on assumptions that are so unrealistic and contradictory as to suggest bad faith or to be in essence an apples and oranges comparison.” *Restivo v. Hessemann*, 846 F.3d 547, 577 (2d Cir. 2017) (quoting *Zerega Ave. Realty Corp. v. Hornbeck Offshore Transp.*,



*LLC*, 571 F.3d 206, 214 (2d Cir. 2009)). But the Second Circuit still recognizes that, “[b]y contrast, ‘other contentions that the assumptions are unfounded go to the weight, not the admissibility, of the testimony.’” *Id.* (quoting *Boucher v. U.S. Suzuki Motor Corp.*, 73 F.3d 18, 21 (2d Cir. 1996)); accord *Kochert v. Greater Lafayette Health Servs., Inc.*, 4:01-cv-0027, 2004 WL 5508690, at \*2 (N.D. Ind. Nov. 15, 2004).

Dr. Schwartz’s assumptions are not unrealistic. As he has explained, the science on equitoxicity of PM and regional differences in the health effects of PM has been inconclusive. It is not an unrealistic possibility, therefore, that all PM of the same size is equally toxic or that regional differences do not alter the C-R curve. Nor are his assumptions in the report contradictory. Therefore, there is no reason to suppose he is engaging in an apples-to-oranges comparison, let alone that he is offering his conclusions in bad faith. These challenges go solely to the inputs Dr. Schwartz has plugged into his framework, not the framework itself. They are therefore not sufficient bases to exclude his testimony under *Daubert* and Rule 702.

The only caselaw cited by Defendant (Doc. 183 at 15)—and, for that matter, Plaintiffs (Doc. 193 at 18)—on this point is completely inapposite. In *Bielskis v. Louisville Ladder, Inc.*, the Seventh Circuit upheld the exclusion of testimony where the expert in question did not support the challenged part of his testimony with even his own *ipse dixit*—the plaintiff’s expert did testify that one of his assertions was widely accepted in the relevant expert community, but the defendant was challenging a different assertion. 663 F.3d 887, 895 (7th Cir. 2011); see also *Heer v. Costco Wholesale Corp.*, 589 F. App’x 854, 861–61 (10th Cir. 2014) (explaining that in *Bielskis*, “the expert made no attempt to test his hypothesis, provided no evidence of

consensus in the engineering community that his theory was accurate, and failed to show that his alternative designs were the product of reliable principles and methods.”) (citation and internal quotation marks omitted). But in that case, the challenge went to the expert’s methods (or lack thereof), not assumptions he made in applying those methods. *See Bielskis*, 663 F.3d at 894–95 (the expert’s “methodology sounded more like the sort of talking off the cuff—without data or analysis—that [the Seventh Circuit] ha[s] repeatedly characterized as insufficient” and the expert’s “‘methodology’ of looking at the failed caster stem with his naked eye could not be subjected to peer review.”) (citation, internal quotation marks, and alterations omitted). To claim, as Defendant does, that *Bielskis* presented “similar circumstances” to the instant case (Doc. 183 at 15) is possible only if one focuses on cherry-picked statements of law artificially divorced from the facts.

## **2. The Differences Between Dr. Schwartz’s Published Works and his Testimony**

Defendant argues Dr. Schwartz’s risk analysis differs from his published work in that he fails to acknowledge differing C-R slopes based on location and because he does not characterize the uncertainty around his C-R slope. (Doc. 183 at 12). The contention about location is, as discussed above, a matter of an assumption. To the extent Dr. Schwartz’s assumption does not accord with his published works, it is a matter for cross-examination rather than the inquiry on admissibility.

What remains is the lack of characterization of uncertainty. The crux of Defendant’s argument is Dr. Schwartz provides a confidence interval in his published and peer-reviewed works, but has not done so here, nor has he discussed the uncertainty that using national data may have added to his conclusion. (Doc. 183 at

13). Plaintiffs respond there was no clear way for Dr. Schwartz to define the confidence intervals here and he used a conservative estimate for the slope—so conservative, in fact, that it is below the lower bound of the confidence intervals in his most recent determination of a C-R slope through meta-analysis of studies. (Doc. 193 at 19–21). In debating this issue, the parties’ memoranda talk past each other. Defendant is arguing the failure to characterize uncertainty is a fatal flaw in the reliability of Dr. Schwartz’s method of using a C-R slope, while Plaintiffs argue the slope itself was correct.

Confidence intervals “are statistical estimates of the range within which there can be reasonable confidence that a correlation or prediction is not the result of chance variability in the sample on which the correlation or prediction was based; 95 percent confidence is the standard criterion of reasonable confidence used by statisticians.” *ATA Airlines, Inc. v. Fed. Exp. Corp.*, 665 F.3d 882, 895 (7th Cir. 2011). It is undisputed that Dr. Schwartz did not use a confidence interval here, but he typically does in his scholarly work. Defendant’s arguments therefore go to the heart of two factors in the *Daubert* analysis: the ability to determine error rate (3) and whether Dr. Schwartz has been as careful in his expert testimony as he is in his non-testimonial professional work (9).

Dr. Schwartz explained that he did not determine a confidence interval in this case because he chose the slope “based on advice that EPA’s scientific advisory board had given them back in 2009,” unlike a slope reached as the result of a meta-analysis, there was no clear way to generate a confidence interval. (Doc. 183-1 at 224). Even without a confidence interval, he testified, scientific studies showing that the

relationship between air pollution and mortality is statistically significant means that the slope must be greater than zero. (Doc. 183-1 at 225).

The deposition testimony understates the reliability of Dr. Schwartz's method. His report explains that the 1.06 slope used has significant scientific backing. It was the average of the estimates reported in an EPA expert elicitation; it was the slope used in a United Nations Environment Program and World Meteorological Association peer-reviewed risk assessment, published in *Science*; and it was almost identical to the center of a later expert elicitation, combined with the most prominent cohort studies, performed by an external scientific peer-review board for EPA (the precise center was 1.05%). (Doc. 193-2 at 85–87). Dr. Schwartz further justified his choice by noting that recent published studies tend to show steeper slopes than the data on which this consensus was founded, making his estimate conservative (Doc. 193-7 at 44), and that his subsequent meta-analysis revealed a slope of 1.29%, with the lower bound of its confidence interval at 1.09%, which is greater than the conservative model used in this case (Doc. 193-9 at 3).

The Court understands Dr. Schwartz's deposition testimony to indicate that confidence intervals are not standard for slopes derived through expert elicitation, but rather for slopes derived from meta-analyses. The slopes from expert elicitation seem to have been tested (1) and subjected to peer review, if not publication (2), and are generally accepted within the field (4) based upon the recommendation of the external EPA peer-review organization. Moreover, the Court does not think it fair to say that Dr. Schwartz was not being as careful in his expert testimony as in his scholarly work (9) just because he was using a different method, given the care he

took in ensuring the 1.06% slope was both accurate and conservative. And while it did not grow out of his non-testimonial work (6), the fact that Dr. Schwartz's peer-reviewed and soon to be published work has confirmed that the 1.06% slope was the type of conservative estimate—too conservative, in fact—that he supposed it to be points to reliability as well.

The QRA certainly would have been more reliable if Dr. Schwartz had used the slope he discovered through meta-analysis with its confidence interval in this case, regardless of the custom of his field regarding unpublished works. But the care with which he chose the slope leads the Court to conclude that his methodology of using the expert elicitation recommended to EPA by an external scientific peer-review organization was not unreliable. That is not to say the methodology is necessarily sound. But, even “‘shaky’ expert testimony may be admissible, assailable by its opponents through cross-examination.” *Gayton*, 593 F.3d at 616. The Court does not find Defendant's argument on confidence intervals and uncertainty sufficient to warrant exclusion under *Daubert* and Rule 702.

### **3. The Conclusion that Any Amount of PM is Harmful**

Finally, Defendant argues Dr. Schwartz's conclusion that any incremental increase in PM emission causes harm has no basis in science. (Doc. 183 at 15). The Court notes again that a *Daubert* challenge must focus on the methods used by the expert, not the expert's ultimate conclusion. *Schultz*, 721 F.3d at 431. Nearly the entirety of Defendant's argument on this point is “there is no basis in science to make the leap that such a small amount of PM causes any actual harm, [so] Dr. Schwartz's opinion should be excluded.” (Doc. 183 at 15).

Defendant appears to be challenging the conclusion that a small incremental increase in PM causes an incremental increase in harm to human health as untethered from data and thus not the product of reliable methodology. (Doc. 183 at 15). Plaintiffs have demonstrated a basis in science for this conclusion. Dr. Schwartz cites his own published work indicating both the linear relation between PM exposure and harm to human health and the lack of a threshold. (Doc. 193-2 at 41–44). Thus, the methodology Dr. Schwartz is using to arrive at his conclusion is detailed in his own peer-reviewed, published studies.

Of the ten factors the Seventh Circuit has stated are helpful in conducting *Daubert* reviews, *Gopalratnam*, 877 F.3d at 779–80, this satisfies at least four of them: Dr. Schwartz’s methodology in the studies has been repeatedly tested (1), subjected to peer review and publication (2), and was done as part of his scientific career independent of this litigation (and therefore he was being as careful in detailing his conclusions here as he was in the peer-reviewed papers) (6 & 9). There is not enough evidence in the record to suggest the other six considerations point the other way. In sum, there are significant indicia of reliability supporting Dr. Schwartz’s conclusion that the relation between PM emissions and harm to human health is linear, meaning an incremental increase in PM results in an incremental increase in harm to human health.

*Krik*, which Defendant cites for the statement that an expert’s testimony can be excluded as unreliable if the methodology used ignores the dose-dependent nature

of diseases like cancer (Doc. 183 at 15), is not to the contrary.<sup>7</sup> In *Krik*, the question was whether a specific individual's illness was caused by a *de minimus* exposure to asbestos. 870 F.3d at 671–72, 674–75. The “each and every exposure” theory rejected by the district court in that case as unreliable, and which Defendant implies bears on this case (Doc. 183 at 15), “posit[s] that any exposure to asbestos fibers whatsoever, regardless of the amount of fibers or length of exposure constitutes an underlying cause of injury to the exposed individual.” *Id.* at 672. In *Krik*, the plaintiff had to prove that a particular exposure was a “substantial factor” in causing his cancer. *Id.* at 677. The each and every exposure theory, by ignoring the dose-dependent nature of diseases like cancer essentially “improperly shift[ed] the burden to the defendants to disprove causation and nullifie[d] the requirements of the ‘substantial factor’ test.” *Id.* at 675, 677.

Despite the superficial resemblances of determining causation from slight increases in exposure, the theory in *Krik* was directed at a completely different inquiry than Dr. Schwartz's testimony. In this case, the question is not whether a specific individual can trace harm to their health to the illegal emissions of Edwards. Rather, the question is whether the illegal emissions have caused harm to human health generally. A small increase may result in an increase of harm in a population, although it is difficult to say which individuals' conditions were caused by that increase. Dr. Schwartz's does not claim to determine that any particular individual was harmed by the excess emissions, only that the incremental increase in emissions

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<sup>7</sup> Defendant cites *Bielskis* for this proposition as well. (Doc. 183 at 15). For the reasons discussed above, *Bielskis* has no application here.

has quantifiable health impacts. (Doc. 193-2 at 41–45; *see also* Doc. 193-7 at 31 (The QRA does not “prove that certain individuals died” due to the excess emissions but rather calculates “how many excess deaths occurred, compared to what would have occurred” absent the excess emissions.”)). *Krik* therefore does not apply to this case.

But that is not the only problem with Defendant’s reliance on *Krik*. The portions of *Krik* Defendant quotes are the Seventh Circuit’s description of the district court’s decision on a pre-trial motion. 870 F.3d at 674–75. But the ruling on that motion was not challenged on appeal. *Id.* at 672. The case was transferred to another judge, who held that an attempted re-packaging of the theory was the same as the “each and every exposure” theory, and therefore barred by the earlier ruling. *Id.* at 677. The question on appeal was whether that determination by the second judge was an “errant factual determination.” *Id.* at 672. The Seventh Circuit did ultimately hold that the second order, excluding the repackaged theory, was correctly reasoned. *Id.* at 677. But the portions of *Krik* cited by Defendant are the reasoning of the district court, not the circuit court.

This Court is always appreciative of litigants presenting persuasive authority from other district courts. But Defendant’s lack of care in attributing to the Seventh Circuit legal statements which were, in fact, the description of a district court opinion only serves to confuse the case.<sup>8</sup> Nevertheless, the quotations from *Krik* do not apply in this case for the reasons stated above.

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<sup>8</sup> The Court notes Defendant also cited a portion of *Bielskis* that was a description of the district court’s reasoning. (Doc. 183 at 15). All of Defendant’s legal citations to back up this argument were therefore the reasoning of other district courts that Defendant attributed to the Seventh Circuit.



## B. Relevance

The test for relevance is whether the expert testimony will assist the trier of fact. *Owens v. Auxilium Pharm., Inc.*, 895 F.3d 971, 972 (7th Cir. 2018). Fit is a specific aspect of relevancy which requires “expert testimony proffered in the case” to be “sufficiently tied to the facts of the case that it will aid the [trier of fact] in resolving a factual dispute.” *Daubert*, 509 U.S. at 591 (quoting *United States v. Downing*, 753 F.2d 1224, 1242 (3d Cir. 1985)); see also *Owens*, 895 F.3d at 972 (quoting *Hartman v. EBSCO Indus., Inc.*, 758 F.3d 810, 819 (7th Cir. 2014)).

Defendant argues Dr. Schwartz’s testimony does not fit this case because: (1) the QRA did not focus on the harm caused by Edwards’s violations of the Clean Air Act, but rather the harm from not having stronger pollution control technology installed; (2) the QRA did not address the specific type of PM—namely, coal fly ash—that Edwards emits; (3) the QRA did not use a Peoria-specific slope; and (4) the other opinions offered are drawn from “generic PM on a nationwide basis,” not studies focused narrowly on the Peoria area and coal fly ash. (Doc. 183 at 4–5, 10). The Court need not delve far into Defendant’s individual objections because they suffer from a common flaw: they all go to the weight of the evidence rather than its admissibility.

In *Daubert*, the Supreme Court illustrated its explanation of fit with the following example:

The study of the phases of the moon . . . may provide valid scientific ‘knowledge’ about whether a certain night was dark, and if darkness is a fact in issue, the knowledge will assist the trier of fact. However, (absent creditable grounds supporting such a link), evidence that the moon was full on a certain night will not assist the trier of fact in determining whether an individual was unusually likely to have behaved irrationally on that night.

509 U.S. at 591.

To extend the example, Defendant's argument that opinions drawn from nationwide data do not fit the case is akin to arguing that the phases of the moon do not bear on whether a particular night was dark because local factors (cloud cover, foliage, light from human settlements, etc.) also impact brightness. While those factors doubtlessly bear on the conclusion, they do not change the relevance of the generic information of phases of the moon. The fact that the moon is in a certain phase on a certain night makes it more likely to be the case that the night was bright (or dark); the fact that, according to Dr. Schwartz, the generic data show any PM exposure causes harm to human health makes it more likely to be the case that excess emissions from Edwards caused harm to human health, and future excess emissions would continue to do so. The same holds true for the use of a C-R slope determined from national data in the QRA. If, in an average region of the country, incremental PM emissions increase harm by a certain increment, it is more likely to be true that they do so in Peoria. And similar is the assumption of equitoxicity—the fact that PM tends to be toxic at a certain average rate makes it more likely to be true that this PM was roughly that toxic.

More difficult is the question of whether the QRA is irrelevant because it focuses on the difference in harm to human health between the current pollution controls in place at Edwards and if Edwards installed one of the pollution control options sought by Plaintiffs. Plaintiffs argue this is the only reasonable approach to measuring the harmful pollution in this case because there is no method of pollution control that would stop only violations of PM limits without reducing PM generally.

(Doc. 193 at 12). Be that as it may, this Court is tasked with examining questions of law, not reason. The QRA—and indeed, all of Dr. Schwartz’s testimony—is relevant primarily to the issue of injury and harm that could be prevented by the grant of injunctive relief. But Congress and EPA have determined that a certain level of PM emission is acceptable. This Court does not think it proper to consider the potential harm to human health that would be averted by more efficient pollution controls to the extent those controls would reduce PM emissions already at acceptable levels according to the Legislative and Executive Branches. *Cf. Weinberger v. Romero-Barcelo*, 456 U.S. 305, 318 (1982) (reading the Federal Water Pollution Control Act “as permitting the exercise of a court’s equitable discretion . . . to order relief that will achieve *compliance* with the Act.” (emphasis in original)). Plaintiffs have cited no law to the contrary.

Nonetheless, this too goes to weight rather than admissibility. Dr. Schwartz opines that if certain anti-pollution technology were installed, the incremental change in PM emissions would result in quantifiably fewer deaths and hospitalizations. He also states that any incremental increase in emissions causes further harm (Doc. 193-2 at 44); it follows that any incremental decrease will prevent further harm. If the increment at issue is the amount exceeded in violation of law, the reduction of PM emissions caused by Plaintiffs’ proposed pollution prevention devices would include that amount because, as Defendant does not dispute, they would fully prevent any exceedances. It is true that the pollution controls will reduce emissions already below the amount in exceedance, but some of what they prevent would be violations of the Clean Air Act. Therefore, the incremental amount of harm

to human health caused by the exceedances is a portion of the total amount of harm prevented by the technology. This makes the QRA relevant.

Whether the Court, as the trier of fact at the trial phase, will ultimately find this testimony credible or of sufficient weight to carry Plaintiffs' burden is of no moment for the instant question. And Defendant is free to raise these arguments about the weight of the evidence at trial through cross-examination or other methods permitted by the Federal Rules of Evidence. But for the *Daubert* review, all that matters is that Dr. Schwartz's proposed testimony fits the case sufficiently to make a material fact more likely to be true.

Defendant's Motion to Exclude the Testimony of Joel Schwartz (Doc. 183) is denied.

## **II. Defendant's Motion to Strike**

This Court's Local Rules require every motion raising a question of law to "identify[] the Rule under which the motion is filed." CDIL-LR 7.1(B)(1). Defendant's Motion to Strike the Declaration of Ian Fisher (Doc. 203) did not identify the Rule under which it was moving. Indeed, it could not have done so for the simple reason that the Federal Rules of Civil Procedure do not provide for striking affidavits submitted as part of the summary judgment procedure. *In re 3RC Mech. & Contracting Servs., LLC*, 505 B.R. 818, 823 (Bankr. N.D. Ill. 2014). While Rule 12(f) allows motions to strike, it does so in the context of pleadings and even there only applies to "any insufficient defense or any redundant, immaterial, impertinent, or scandalous matter." Nothing in that Rule suggests it would apply here. *United Steel, Paper and Forestry, Rubber, Mfg., Energy Allied Indus. & Serv. Workers Int'l. Union*

*v. Graphic Packaging Int'l., Inc.*, No. 06-C-1188, 2007 WL 2288069, at \*3 (E.D. Wis. Aug. 4, 2007) (“*Graphic Packaging*”).

The Seventh Circuit has made clear that motions to strike are strongly disfavored as they are often nothing more than an attempt to circumvent the allowance of pages. *Custom Vehicles, Inc. v. Forest River, Inc.*, 464 F.3d 725, 727–28 (7th Cir. 2006) (Easterbrook, J., in chambers); *Redwood v. Dobson*, 476 F.3d 462, 471 (7th Cir. 2007). Although the Seventh Circuit was speaking in the context of motions to strike requesting redline edits of appellate briefs, its reasoning applies with the same force to motions to strike affidavits during the consideration of summary judgment. *Graphic Packaging*, 2007 WL 2288069, at \*3. Rule 56(c)(2) does allow parties to object that “material cited to support or dispute a fact cannot be presented in a form that would be admissible in evidence.” But there is a procedure for making such objections: the reply memorandum. CDIL-LR 7.1(D)(3); *cf. Redwood*, 476 F.3d at 471 (“The Federal Rules of Appellate Procedure provide a means to contest the accuracy of the other side’s statement of facts: that means is a brief . . . not a motion to strike.”). Motions to strike “allow parties to circumvent the page limitations of briefs by providing them an opportunity to present what should be part of the argument for or against granting the pending motion in an entirely separate round of briefing.” *Graphic Packaging*, 2007 WL 2288069, at \*3.

The potential to circumvent page limitations is on full display here. The Local Rules allow reply memoranda an argument section of five pages. CDIL-LR 7.1(D)(5). Defendant, without objection from Plaintiffs and with the Court’s permission, filed a six-and-a-half page memorandum in reply (Doc. 208-1) which exceeded that

limitation. (Docs. 208, 217, 220). Defendant's Motion to Strike is another nine pages, meaning if it were allowed, Defendant's total reply would be three times the number of pages allowed under CDIL-LR 7.1(D)(5). (Doc. 203). And, as noted in *Graphic Packaging*, the Motion to Strike triggered another round of briefing. (Doc. 207).

This case is a complex one. Because the Local Rules are designed for all cases in the district, regardless of the complexity, the Court is understanding of requests to loosen the Rules where necessary. (Doc. 220 at 2). But the case's complexities do not need to be exacerbated by failure to comply with procedural requirements or extra briefing. Defendant's Motion to Strike the Declaration of Ian Fisher (Doc. 203) is therefore denied, and its contents will not be considered by the Court.

### **III. Plaintiffs' Motion for Leave to File a Response**

Plaintiffs ask this Court for leave to file a limited response to Defendant's objection to the use of unsworn expert witness reports in Plaintiffs' response to Defendant's motion for summary judgment. (Doc. 221). Defendant has filed a response requesting that the Court "deny, in part, Plaintiffs' motion." (Doc. 225 at 2). Defendant's response does not actually indicate a position on whether this Court should allow Plaintiffs to file their proposed response. Rather, it responds substantively by noting Defendant's objections to Dr. Schwartz's testimony and reserving Defendant's rights to file further motions concerning evidence as trial approaches. (Doc. 225 at 1–2).

In ruling on motions for leave to reply in this case, the Court has explained that it "will permit reply briefs if the opposing motion has introduced new and unexpected issues." (Doc. 220 at 2 (quoting Doc. 130 at 12–14)). That standard applies

in this context as well. Defendant's objections in their reply (Doc. 208-1) fall into the category of new and unexpected issues. Therefore, Plaintiffs' motion for leave to file a response is granted, and the arguments in their response (Doc. 221-1) will be considered by the Court.

The Court recognizes that the Local Rules are designed to allow the party moving for summary judgment a chance to reply to responses. CDIL-LR 7.1(D)(3). In this spirit, and because Defendant's submission engages the merits of Plaintiffs' response, the Court will construe Defendant's Response to Plaintiffs' Motion for Leave (Doc. 225) as a sur-response to Plaintiffs' Response to Defendant's Objection to Consideration of Expert Reports on Summary Judgment (Doc. 221-1) and consider the sur-response to the extent Defendant's arguments therein are not rendered moot by other rulings in this Order & Opinion. Further requests from any party for opportunities to brief issues arising out of the cross-motions for summary judgment and attendant motions will be viewed unfavorably.

#### **IV. Plaintiffs' Requests for Oral Argument**

Plaintiffs properly requested oral argument on their and Defendant's motions for partial summary judgment under Local Rule 7.1(D)(4) by placing the requests in their motion and response, respectively. (Docs. 184 at 2, 198 at 9 n.1). Plaintiffs did not, however, indicate why they believe oral argument would aid the Court in deciding the motions. Defendant has not stated a position on these requests. At this time, the Court does not think oral argument necessary and in its discretion denies Plaintiffs' requests. Should the Court determine that oral argument would be helpful, it will notify the parties.

## CONCLUSION

For the reasons stated, Defendant's Motion to Exclude the Testimony of Joel Schwartz (Doc. 183) and Motion to Strike the Declaration of Ian Fisher (Doc. 203) are DENIED. Plaintiffs' requests for oral argument are DENIED and Plaintiffs' Motion for Leave to Respond to Defendant's Objection to Consideration of Expert Reports on Summary Judgment (Doc. 221) is GRANTED.

SO ORDERED.

Entered this 1st day of November, 2018.

s/Joe B. McDade  
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JOE BILLY McDADE  
United States Senior District Judge