BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

SIERRA CLUB, NATURAL RESOURCES DEFENSE COUNCIL, PRAIRIE RIVERS NETWORK, and ENVIRONMENTAL LAW & POLICY CENTER Petitioners, v. ILLINOIS ENVIRONMENTAL PROTECTION AGENCY and MIDWEST GENERATION, LLC Respondents.	)	PCB 2015-189 (Third Party NPDES Appeal)

NOTICE OF ELECTRONIC FILING

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PLEASE TAKE NOTICE that I have today filed with the Office of the Clerk of the Pollution Control Board Respondent Midwest Generation, LLC's Reply to Petitioners' Post-Hearing Brief, a copy of which is herewith served upon you.

Dated: December 14, 2016

MIDWEST GENERATION, LLC

By: /s/ Susan M. Franzetti

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RESPONDENT MIDWEST GENERATION, LLC'S
REPLY TO PETITIONERS' POST-HEARING BRIEF

Respondent, Midwest Generation, LLC ("MWGen") by its counsel, submits the following reply to Sierra Club, Natural Resources Defense Council, Prairie Rivers Network, and Environmental Law & Policy Center's ("the Petitioners") post-hearing brief. (Hereinafter "Pet'r's Post-Hearing Br.") MWGen renews its previous request that the Board uphold the Illinois Environmental Protection Agency's (the "Agency") final permitting decision because the Petitioners have failed to meet their burden to prove that the subject National Pollutant Discharge Elimination System ("NPDES") permit for the MWGen Waukegan Generating Station ("Waukegan Station,") was issued in violation of the Illinois Environmental Protection Act ("Act") or Board regulations. Alternatively, Petitioners' appeal petition should be dismissed for failure to comply with the requirements of the Act.

INTRODUCTION

The Petitioners have the burden of proof in this appeal. (Opinion and Order, p. 9-10, PCB 15-189 (April 7, 2016), hereinafter the "Board Order".) Yet, their post-hearing brief both selectively ignores the evidence in the permit record showing that the Waukegan Station's

thermal alternative effluent limitation ("Thermal AEL") has not caused any appreciable harm to the aquatic community and fails to cite any evidence in the permit record showing otherwise. Petitioners also fail to provide any evidence that the Station's thermal effluent has changed in a material way that requires more evidence than is already in the record to support the Agency's decision to renew the Thermal AEL. Similarly, while generally contending that the Agency's determination that the Station's cooling water intake structure ("Intake Structure") met the interim BTA standard under the applicable federal 316(b) regulations, the Petitioners cite no evidence showing that there were required changes to either the Station's operations or the Intake Structure necessary to satisfy the interim BTA standard.

To the extent that Petitioners' post-hearing brief cites the permit record, they repeatedly misstate the contents of the documents in the record and mischaracterize isolated quotes from hearing testimony and Respondents' legal pleadings. Pursuing this same misleading strategy, Petitioners select isolated pieces of data from the record and, through only their counsel's representations, offer expert opinions on how this information should be interpreted. Not only are Petitioners' attorneys unqualified to offer such opinions, but attempting to do so in post-hearing briefs is procedurally improper under the Board's rules. The Board should not be swayed by incompetent "evidence" that Petitioners chose not to introduce through witness testimony at the hearing, where cross-examination and/or rebuttal expert testimony would have revealed its flaws and inaccuracies.

In stark contrast, the Agency's permitting decision was supported by multiple expert opinions that are contained in the permit record, many of which were not contested by the Petitioners. To the extent that the permit record left any ambiguity in how the Agency evaluated the key pieces of evidence in this matter—which may have been an unavoidable consequence of

the governing regulations changing repeatedly during the permit renewal process—the hearing testimony from Agency staff has filled in those blanks.

Finally, the Petitioners ask the Board to revisit previous legal arguments they made at the summary judgment stage of this appeal. But the Petitioners offer no substantive changes or improvements to those arguments this time around, nor do they respond to Respondents' prior rebuttals. These arguments should again be rejected by the Board.

ARGUMENT

I. The Illinois EPA's Decision to Renew the Thermal AEL Does Not Violate the Act or Board Regulations.

A. The Agency's Determination That the Waukegan Station's Thermal Effluent Did Not Materially Change Was a Reasonable Conclusion.

Subpart K allows for "streamlined" renewal procedures for thermal AELs, but, as the Board previously noted, these procedures will not apply when the "nature" of a permittee's thermal effluent "changed materially." (Board Order, at 12, citing 35 Ill. Adm. Code 106.1180(d).) The Waukegan Station's operations have changed, but only because both the flow rate and heat-rejection rates have decreased since the Thermal AEL was granted in 1978. (R:239-40.) The parties do not disagree about this fact, but disagree on whether the change was "material."[1] (See Pet'r's Reply Mot. S.J. at 27.)

[1] As discussed in Section I.A.3, *infra*, MWGen also contends that this operational change did not constitute a change in the "nature" of the plume, because the combined reductions in both flow rate and heat-loading rate mean that the change in the Waukegan Station's "delta-T" has been negligible. Petitioners' erroneous contention that both MWGen and the Agency conceded that the nature of the effluent changed is not supported by the citations provided. (See Pet'r's Post-Hearing Br. at 8.) In fact, both Respondents argued there was no change in the nature of the effluent in their summary judgment briefings. (MWGen's Reply Mot. S.J. at 25-26; Agency Reply Mot. S.J. at 15-16.)

1. A change that will, if anything, benefit the local aquatic community is not "material" for purposes of Subpart K or the Act.

Without facts to support the position that a significant reduction in thermal loading is a "material change" within the meaning of the Subpart K regulations, the Petitioners still contend that for purposes of the renewal of the Thermal AEL, the reduced Waukegan Station generating capacity and its 39% reduction in thermal effluent loading is a "dramatic" or "relevant" change that must also be "material" within the meaning of Subpart K.[2] (Pet'r's Post-Hearing Br. at 10.) This argument is illogical. A decrease in thermal loading is not "material" within the meaning and purpose of the Subpart K thermal AEL renewal provisions. Subpart K serves the purposes of the Act, which are to "restore, protect and enhance the quality of the environment and to assure that adverse effects upon the environment are fully considered and borne by those who cause them." *See* 415 ILCS 5/2(b). So Subpart K is likewise focused on "adverse effects," and it would not consider an operational change that has no adverse effect on the environment—or if anything, a beneficial effect—to be a "material" change. Petitioners cite no evidence in the record indicating that decreases in thermal loading of the type at issue here will have adverse effects on the aquatic community.

Petitioners reasoning defies logic and common sense. Section 106.1180(d) of Subpart K provides that "[i]f the nature of the thermal discharge has changed materially . . . the Agency may not include the thermal relief granted by the Board in the permitee's renewed NPDES permit." Thus, if the Board adopts Petitioners' argument that a significant reduction in the volume and heat rejection rate of a thermal discharge constitutes a "material change," the

[2] In context, these statements referred to physical changes, not ecological ones, as Petitioners misleadingly suggest. (IEPA Reply Mot. S.J. at 15; R:239.) Indeed, with the elevated 1978 heat-rejection levels having caused "virtually no" harm to the aquatic community, it is not conceptually possible for a dramatic reduction in loading to produce any "dramatic" effects, adverse or otherwise, as Petitioners contend.

Agency would be required under Section 106.1180(d) to deny renewal of the thermal AEL and the permittee would have to start the thermal AEL process over again by petitioning the Board for a new AEL. It follows that whenever a permittee's thermal effluent loading decreased (although the temperature of its discharge remained essentially unchanged) from one permit cycle to the next, it would risk losing its thermal AEL at the next permit renewal. Particularly for electric generating stations that ride the tides of high and low demand for the energy they produce and sell, it would be arbitrary and unreasonable to hold that a reduction in thermal loading in response to lower energy demand during a given permit cycle would bar the Agency from renewing a permittees' thermal AEL. Such an illogical interpretation of the Subpart K regulations would actually encourage permittees to avoid reducing their heated effluent discharge or risk losing their thermal AEL. This is clearly not a plausible interpretation of Subpart K's AEL renewal provisions.

As MWGen explained in its Post-Hearing Brief, a "material change" is a change which reasonably may support a decision by the Agency not to renew the thermal AEL. The Agency reasonably concluded here that the reduction in the Waukegan Station's thermal loading to Lake Michigan was not such a change. Petitioners have failed to carry their burden to show otherwise.

2. Subpart K Section 106.1180(c) does not require permitees to conduct new, de *novo*, thermal demonstrations whenever a thermal discharge changes in any way.

Petitioners insist that Subpart K Section 106.1180(c) "requires" the Agency to deny all AEL renewal requests whenever they identify a "change," even an immaterial one, in the nature of the permittee's thermal discharge. (Pet'r's Post-Hearing Br. at 9.) In its summary judgment Order, the Board did not see the need to respond to this argument directly and instead instructed the parties to address the question of "material change" under Section 106.1180(d) at the hearing.

(Board Order at 12.) Consequently, MWGen's post-hearing brief focused on the "material change" provisions of Subsection (d) and not the alternative Subsection (c) provision which addresses the unchanged "nature of the discharge." MWGen briefly addresses here Petitioners' misinterpretation of Subsection (c) of 106.1180 of the Subpart K regulations.

As an initial matter, Petitioners' post-hearing brief selectively quotes Subsection (c), omitting the Subsection's additional permissive language:

> "If the permittee demonstrates that the nature of the thermal discharge has not changed . . . the Agency may include the alternative thermal effluent limitation in the permittee's renewed NPDES permit."

35 Ill. Adm. Code 106.1180(c) (emphasis added). By its use of the permissive "may," Subsection (c) provides *one* possible path for a thermal AEL to be renewed, but not the only path. In turn, if the nature of the thermal discharge has changed, then Subsection (d) bars the Agency from renewing the thermal AEL only if that change rises to the level of "materially" altering the nature of the thermal discharge. Petitioners' interpretation of Subsection (c) that *any* change in the nature of the discharge also prevents the Agency from renewing a thermal AEL, turns the stricter "material change" requirement in Subsection (d) into mere surplusage—contrary to established rules of statutory and regulatory construction. *See A.K.A. Land, Inc. v. IEP*A, PCB 90-177, at 12 (Mar. 14, 1991); *People v. Jones*, 223 Ill. 2d 569, 581 (2006) ("We construe statutes as a whole, so that no part is rendered meaningless or superfluous."). MWGen pointed out this flaw in the Petitioners' logic in prior briefing (MWGen Reply Br. at 25 n.17) and the Petitioners have failed to respond, let alone refute, this point.

The Petitioners are not offering a plausible interpretation of how Subpart K was intended to operate. There is nothing in the Subpart K rulemaking suggesting that the Board intended to punish thermal AEL permittees for changing their operations in any way that either constitutes a

change in the nature of the thermal discharge (no matter how negligible or immaterial) or that may benefit the aquatic community. *See in re DF*, 802 N.E.2d 800, 805 (Ill. 2003) ("A court, however, is not bound by the literal language of a statute that produces a result inconsistent with clearly expressed legislative intent, or that yields absurd or unjust consequences not contemplated by the legislature."). Petitioners do not and cannot offer any explanation for how applying Subpart K this way is necessary to serve and protect the environment.

Petitioners' argument is contrary to the express language of Subsection (d) and would require the Board to violate established rules of construction. The Board should maintain its decision not to adopt Petitioners' interpretation of Section 106.1180(c).

3. The nature of the Waukegan Station's thermal effluent did not change.

MWGen submits that the Waukegan Station's reduced thermal discharge should not be interpreted as change in the "nature" of the thermal discharge within the meaning of Section 106.1180(c). A change in the nature of a thermal discharge would be a change to its "inherent character or basic constitution." Merriam-Webster, http://www.merriam-webster.com/dictionary/nature. For the purposes of Subpart K, the "inherent character" of thermal effluent is whether or not its temperature has the potential to cause appreciable harm to the aquatic community. *See* 415 ILCS 5/2(b) (stating that the purpose of the Act, and its supporting regulations, is to address activities causing an "adverse effect" on the environment).

As MWGen noted previously, the permit record shows that the temperature of the discharge has not meaningfully changed. (MWGen Reply Mot. S.J. at 25-26.) Since 1978, the Waukegan Station has reduced its water usage and its heat-rejection rates by nearly the same amount. (R:239-40.) This means that the "delta-T" of the Station (*i.e.*, the temperature increase from the temperature of the intake cooling water to the temperature of the effluent discharge) did

not meaningfully change, a fact that the Petitioners did not dispute after both Respondents raised this point in their summary judgment pleadings. (MWG's Reply Mot. S.J. at 25-26; Agency Reply Mot. S.J. at 15-16.)

The absence of any meaningful change in the temperature of the Station's discharge would support the Agency's conclusion that the thermal effluent's inherent character, for purposes of the Act and Subpart K, had not changed since 1978. So would the Petitioners' own prior statement regarding the Waukegan Station's thermal discharge that "the last four years of Discharge Monitoring Report . . . data demonstrate that the situation *has not fundamentally changed* [since a 1971 thermal study by Argonne National Laboratory]." (R:1138, emphasis added.) For these reasons, MWGen maintains that the Agency had the authority to renew the Thermal AEL pursuant to Subsection (c) because "the nature of the thermal discharge has not changed" and the Thermal AEL has not caused appreciable harm to the aquatic community.

B. Substantial Evidence Supports the Agency's Finding That the Thermal AEL Has Not Caused Appreciable Harm.

1. The Petitioners failed to prove that reducing the Waukegan Station's thermal load would cause appreciable harm, as required under the Subpart K regulations.

Petitioners concede that the substantial-evidence standard does not call for the Board to review the facts and fashion its own permitting decision. Instead, the Board must decide whether the Agency's decision is supported by "such relevant evidence as a reasonable mind might accept as adequate to support the Agency's conclusion." (Pet'r's Post-Hearing Br. at 7, citing *Am. Bottom Conservancy v. IEPA*, PCB 06-171, at 13-14 (Jan. 26, 2007).)

It is clearly reasonable to conclude, as the Agency did here, that reducing a station's thermal load from what it was when it was extensively studied and found not to cause any appreciable harm will not harm the local aquatic community. At the hearing, the Agency's

permit writer, who is qualified through experience and training to offer an expert opinion on this point, so testified. (Hearing Tr. at 21.) The Agency's expert opinion, combined with the undisputed fact that the Waukegan Station now discharges *less* heat into Lake Michigan than it did in 1978, is substantial evidence supporting the Agency's conclusion that the Station's discharge had not changed materially.

The Petitioners point to nothing in the record that contradicts Agency permit writer Mr. Rabins' testimony except, they claim, the following quote from the Great Lakes Commission:

> The magnitude of thermal effects on ecosystem services is related to facility-specific factors, including the volume of the waterbody from which the cooling water is withdrawn and returned, other heat loads, the rate of water exchange, the presence of nearby refugia, and the assemblage of nearby fish species.

(Pet'r's Post-Hearing Br. at 11, citing R:477-78.)

Petitioners selectively omitted the rest of the Great Lakes Commission's statements which identify only *increases* in thermal loading as the type of changes likely to have a material effect on the aquatic community:

> Elevated temperatures can cause a decrease in the amount of dissolved oxygen in the water. If temperatures increase dramatically, reproductive function and nervous system function may degenerate. Warmer temperatures can also increase aquatic organism susceptibility to certain pathogens or environmental pollutants.

(R:477-78.)

And finally, nothing in the Petitioners' selective Great Lakes Commission quotation contradicts Mr. Rabins' expert opinion that decreases in thermal loads will generally produce ecological benefits. Indeed, the Agency considered the existence, or nonexistence, of other heat

loads, the size of the receiving waters (Lake Michigan contains 1,108 cubic miles of water), and data suggesting stable species diversity, in reaching the conclusion that the Waukegan Station's thermal effluent had not materially changed since 1978. (R:114, 669, 767; Hearing Tr. at 126-27, 130.) Petitioners' complaint that aquatic communities are too complex for Mr. Rabins' expert testimony to be accurate is an unsupported representation by counsel. (Pet'r's Post-Hearing Br. at 11.) No such testimony was presented at the hearing or in the permit record. Furthermore, without any explanation of *what* biological dynamics could possibly cause reduced thermal loading to counterintuitively harm the aquatic community (much less actual evidence of such an effect) Petitioners clearly fail to meet their evidentiary burden.

2. Petitioners' new plume-shift theory is pure speculation, unsupported by any evidence in the record, and does not meet their burden of proof.

During the permitting phase and continuing through their appeal petition, Petitioners never suggested that the Agency had to consider that the reduced flow and heat loading would cause the Waukegan Station's thermal plume to shift significantly to a new, previously unstudied, portion of Lake Michigan.[3] Now, following a hearing where the Petitioners *again* failed to present any evidence or testimony to support this speculation, they reintroduce it in their post-hearing brief (Pet'r's Post-Hearing Br. at 10-11,) and criticize the Agency for not considering a factually unsupported theory that Petitioners themselves have been unable to substantiate with any scientific information or expert opinion.

There is no evidence in the permit record supporting Petitioners' theory. They simply take the fact that the Waukegan Station discharges significantly less water than it did in 1978 and weave hypotheticals on top of that. Because the Petitioners have not offered any explanation as

[3] The Petitioners' novel "significantly shifting plume theory" made its one-sentence debut in their motion for summary judgment but was abandoned in their summary judgment reply brief. (Pet'r's Mot. S.J. at 28.)

to how or why the plume would have moved beyond the area it affected when significantly more heat was being discharged through the Station's outfall structure in the late 1970's, they have presented no evidence that the plume affects a different, more thermally sensitive aquatic community than the community extensively studied in the 1978 AEL proceeding.[4] (R:203.) Certainly, the record contains no factual support for the notion that the aquatic population would be harmed by a thermal discharge that gives off 39% less heat given the Board found, based on those extensive studies, it had "virtually no" ecological impact. (R:1116.)

And the Petitioners selectively ignore the evidence in the record showing that the 1978 thermal studies identified the thermal plume as a dynamic phenomenon which was not constantly in one place, even at the higher 1970's flow rate. The Board expressly took note of this evidence and considered the plume's shifting in reaching its finding that the thermal discharge did not cause any appreciable harm. In its PCB 77-82, -83 Opinion, the Board clearly stated that "[l]ake currents parallel with the shore rapidly bend the plume either north or south," and that its conclusions took these documented plume patterns into account. (R:1116.) During the hearing in this appeal, Mr. LeCrone credibly testified, with no challenge from the Petitioners, that thermal plume studies will typically review plume-shift scenarios, and that the historical thermal studies would have conducted this review. (Hearing Tr. at 120-21.) He further testified that he did not know of any changes in Lake Michigan's currents that could undermine the findings of the historical studies. (Id. at 120.)

At bottom, the Petitioners insist that the Agency needed to provide written documentation, in the permit record, showing its consideration of whether the plume could have shifted and caused appreciable harm in a more thermally-sensitive aquatic community. They

[4] The studies included not only thermal-plume studies and lake-current studies, but also monitoring of fish, fish eggs, and fish larvae; literature reviews of thermal tolerances of indigenous species; and sampling/analysis of phytoplankton, zooplankton, and benthic life. (R:203)

further argue that the Agency was required to do this even if no participant in the permit proceeding raised the plume-shift theory as a possibility.[5] Petitioners' argument shirks their own evidentiary burdens on appeal, and they do not cite a single fact in evidence that supports their theory. The absence of discussion of hypothetical, unspecified plume shifts in the permit record is a bald and belated contention by Petitioners—the Agency had no obligation to "document" unraised arguments in the record in order to reasonably conclude that the Thermal AEL should be renewed. Further, Mr. LeCrone's testimony reasonably explains why the Agency did not conclude that the plume would have shifted to a previously unknown or unstudied area due to the reduction in loading.

Petitioners simply turn a blind eye to relevant authorities advising regulators that CWA § 316(a)—the model for Subpart K—does not require the consideration of speculative scenarios, rebutted by historical studies, to justify an AEL renewal. *In re Seabrook Station NPDES Permit*, 1 EAD 332, 1977 WL 22370, at *11 (1977), *rev'd on unrelated grounds by Seacoast Anti-Pollution League v. Costle*, 572 F.2d 872 (1st Cir. 1978); 44 Fed. Reg. 32854, 32894 (June 7, 1979) (preamble to Final Rule establishing 40 C.F.R. § 125.72) (noting that extensive proof of the lack of appreciable harm will typically be required only where other evidence shows "that circumstances have changed, that the initial variance may have changed, that the initial variance may have been improperly granted, or that some adjustment in the terms of the initial variance may be warranted."); *see also* U.S. EPA Report, MWGen's Post-Hearing Br., Attachment B, at 16 ("Although facilities engage in a great deal of research and data collection to initially acquire a [thermal AEL], the amount of data required by the permitting authority to support reissuance . . . usually is minimal.").

[5] Presumably, they would also require the Agency to document an evaluation of *every* theoretically possible scenario that could cause appreciable harm, no matter how remote or unsupported by available data.

During the permitting process, the Agency learned that the Waukegan Station had reduced its thermal loading by 39 % and then discovered that experts in Lake Michigan's ecology did not view thermal discharges as playing any significant role in the health of the aquatic community. This included the opinions of scientists at the USGS, who had conducted recent sampling surveys in the vicinity of Waukegan and reported no evidence that local prey fish were affected by thermal discharges. (R:222, 231-32.) From this and other evidence presented during the permitting phase, the Agency was justified in applying a level of review that would not force its permit writers to invent and rule out all possible vectors of ecological harm, no matter how unlikely. (R:222, 231-32, 618.)

3. The Agency's no-appreciable-harm finding complied with Subpart K and was based on a reasonable review of the evidence in the permit record.

i. The Agency's finding was supported by substantial evidence.

Consistent with the applicable standard of review, the Agency's finding of no appreciable harm was based on evidence in the record that a reasonable person might find adequate for that purpose. *See Am. Bottom Conservancy*, PCB 06-171, at 13-14. The Agency had before it a current 2009 study performed by an independent government body, the USGS, which evaluated the Lake Michigan aquatic community and which included sampling data collected in close proximity to the Waukegan Station discharge. The Agency reasonably concluded that the lakewide biomass declines indicated by the 2009 USGS study were being caused by a lakewide phenomenon, a finding consistent with the study's conclusion that nonindustrial factors were causing the declines. (R:222, 231-32.) The USGS 2009 study's conclusions were confirmed by the IDNR's finding, which the Agency solicited as part of its renewal review, that the aquatic declines were caused by nonindustrial factors. (R:618.) And the Agency also considered the 2003-2004 findings from MWGen's impingement surveys, which showed that the local aquatic

community was dominated by invasive species, and therefore had not radically changed following the Board's granting of the Thermal AEL in 1978. (R:1216; Hearing Tr. at 64, 127-28.) The MWGen 2003-2004 impingement study results also indicated increasing species richness—certainly not evidence of "appreciable harm" caused by the Thermal AEL. (R:1216.) Finally, the Agency reasonably considered the findings of the 1978 studies, as documented and endorsed by the Board, concluding that the Waukegan Station's thermal effluent produced "no appreciable harm." (R:1-3; Hearing Tr. 21, 117-18.) It also made the reasonable supposition that the Waukegan Station's significant reductions in thermal discharges since 1978 meant that the studies, if anything, were now *overstating* the potential for appreciable harm. (R:767-68.) This evidence was sufficient to support a finding that the Waukegan Station did not cause appreciable harm to the aquatic community.

The Petitioners cite no evidence in the permit record showing that the Thermal AEL is causing appreciable harm to the aquatic community. Instead, they ignore key pieces of evidence and use their counsel's unsupported and biased representations to support their challenge. For instance, the Petitioners do not address the 2009 USGS Study's conclusion that aquatic declines had nonindustrial causes, even though MWGen repeatedly highlighted this point in earlier filings. (R:204; MWGen's Reply Mot. S.J. at 27; MWGen's Pre-Hearing Br. at 4-5.) They do not challenge this finding or argue that it cannot be applied to the waters in the Waukegan area. How could they? They themselves submitted this Study to the Agency as relevant evidence in their comments on the draft Waukegan permit. (R:1043.) They also take no issue with the opinion of the IDNR, even though that opinion could, standing alone, meet the substantial-evidence requirement. *See in re Aurora Energy, LLC*, 2004 WL 3214470, at *6 (Env. Appeals Bd., Sept. 15, 2004) (affirming thermal AEL where Regional Administrator,

applying 40 C.F.R. § 125.73(c)(1), declined to require permittee to conduct new aquatic studies because "the discharge has been occurring for over 50 years with no adverse impact on [the BIP]" and because the USEPA had reviewed information from the Alaska Department of Fish and Game).

The Petitioners also insist that the permit record does not reveal the findings of the 1978 thermal studies, or that to the extent these findings are present they are "a handful of isolated data points that are offered at Midwest Generation's say-so, with no scientific validation." (Pet'r's Post-Hearing Br. at 15.) They are mistaken. The findings of those studies are found in PCB 77-82 and PCB 78-72, -73, where the Board not only recited, but endorsed, the studies' conclusions that the effluents of both the Waukegan Station, and the much larger Zion Generating Station ("Zion Station"), caused no disruption of the zooplankton community, had not been associated with any fish kills, and "ha[d] not caused and cannot be reasonably expected to cause significant ecological damage to receiving waters." (R:1, 1116.)

Petitioners' argument that the "Best Evidence Rule" required the Agency to ignore the findings recited in the Board's 1978 Orders because the underlying studies could not be found is also misguided. (See Pet'r's Post-Hearing Br. at 14-15.) As an initial matter, the Best Evidence Rule permits the consideration of "other evidence of [the original's] contents" if the originals have been lost or destroyed. Ill. R. Evid. 1004(1); *see also id.* at 1004(2) (establishing similar exception for when original cannot be obtained through any available judicial process or procedure). The permit record shows unsuccessful efforts to locate the studies. (R:492.) Further, the Best Evidence Rule is rarely applied to administrative proceedings, *see* 2 Kenneth Davis, *Administrative Law Treatise* § 14.03 (1958), and like all evidentiary rules, is overshadowed by the Illinois Administrative Procedures Act, which calls for the admission of any evidence that

"is of a type commonly relied upon by reasonably prudent [people] in the conduct of their affairs," 5 ILCS 100/10-40(a); *see also Glasgow v. Granite City Steel*, PCB 00-221, 2002 WL 392181, at *3 (Mar. 7, 2002) (acknowledging applicability of 5 ILCS 100/10-40(a)). The Agency had no reason to question the Board's own recitation of the findings of the historical thermal studies (which the Board endorsed following a hearing where an environmental group appeared and was given the opportunity to dispute those findings,) and the Agency did not err in using those findings in its permitting decision.[6] (Hearing Tr. at 21, 117-18.) In any event, this new objection is untimely and therefore waived. *Jones v. Consolidation Coal Co.*, 174 Ill.App.3d 38, 42-43 (5th Dist. 1988) (evidentiary objection in closing argument is untimely).

In their post-hearing brief, Petitioners also contend that part of the reason the Board granted the Thermal AEL was because ComEd promised to perform the additional studies and that their absence from the permit record means they were never conducted, implying that this somehow either invalidates the Thermal AEL or justifies a decision by the Board to reverse the Agency's decision to renew it:

> The record contains no studies of thermal impacts since the variance was first issued in 1978, (Tr. 29:11-30:11), despite the fact that part of the Board's reasoning behind issuing the original variance was that "Edison has promised to continue studying possible damaging effects on the Lake in the future."

(Pet'r's Post-Hearing Br. at 13.)

[6] Petitioners seek to attach significance to a statement from one of the two Agency witnesses that the permit record does not contain a "substantive" summary of the findings of certain historical studies. (Pet'r's Post-Hearing Br. at 14.) However, the Agency witness was referring to studies that were transmitted to U.S. EPA in 1974 to support an AEL request before that agency; the record does not establish that these were the same studies presented to the Board in 1978. (R:241) Nor can the Petitioners meet their burden of proof by pointing to one witness's characterization of the record; the testimony gives no indication what the witness meant by "substantive," and in any case, the findings in the record speak for themselves. (Hearing Tr. at 36.)

MWGen has provided the Board with historical documents showing that the Board's 1978 statement about additional studies promised by ComEd addressed additional studies of the Zion Generating Station's discharges (not the Waukegan Station discharges) and that those studies were performed. (MWGen Post-Hearing Br. at 26-29 & Exhs. G–I.)[7] There were no "gaps" in or concerns raised by the Waukegan Station studies on which the Board relied to grant the original Thermal AEL that needed to be addressed by any additional studies, as wrongly implied by Petitioners. The historical documents show that the Waukegan Station's 1979 NPDES permit clearly referenced the requirement to conduct additional studies at Zion Station only and that no further studies either at Zion or Waukegan were required in the next, renewed Waukegan Station NPDES permit. The only reasonable inference to be drawn from these historical documents is that the additional studies performed on the significantly larger Zion Station thermal discharge did not identify any grounds for concern regarding thermal impacts from either the Zion Station or the nearby Waukegan Station. Today, only the Waukegan Station is operating, which is another change that could only have beneficial ecological effects after the Waukegan Station Thermal AEL was granted.

ii. The Agency did not err in considering the PIC data as relevant evidence of conditions in the local aquatic community.

The Agency would have been reasonable in finding no appreciable harm based solely on the 2009 USGS Study, the Board's historical findings, MWGen's operational data, and the 2014 findings of the IDNR. Yet, the Petitioners barely address those facts, while devoting the bulk of their attention to the Agency's consideration of the findings of the 2005 PIC study, which

[7] Anticipating that Petitioner would object to the inclusion of these relevant documents as attachments to post-hearing briefs, MWGen asked the Hearing Officer to rule on whether these attachments offended Section 40(e)(3)(ii) of the Act, or Section 105.214(a) of the Board's regulations. On December 8, 2016 the Hearing Officer ruled in MWGen's favor, concluding that "references to the documents included in their post-hearing briefs are allowed." See *Hearing Officer Order*, PCB 2015-189, at 2 (filed Dec. 8, 2016).

indicated that the species in proximity of the Waukegan Station had not significantly changed in composition since the original Thermal AEL studies were performed and that overall species richness may have increased. (Pet'r's Post-Hearing Br. at 12-13.)

The Petitioners scorn the Agency's consideration of the PIC's findings because, according solely to their counsel, this was not a "legitimate" way to evaluate the status of the local aquatic community and "says absolutely nothing" about whether appreciable harm occurred since 1978. (Id. at 13.) This late effort to dispute the reliability of the PIC studies is unsupported by the permit record and does not meet the Petitioners' burden of proof. The Petitioners had opportunities, both during the permitting phase and during this appeal to present qualified expert opinions and testimony regarding the reliability of these studies. They did not take those opportunities. They presented no witnesses at the hearing other than the two Agency witnesses. And, they could have asked the Agency witnesses, who have the qualifications to testify as experts in this area, to explain the discrepancies that the Petitioners now claim totally eliminate the usefulness of the PIC data. Yet they declined to test their theories with the Agency witnesses, leading to the reasonable inference that the Agency witnesses would have refuted them.

The Petitioners are again resorting to a strategy of "blindsiding" both the Agency and MWGen that they have utilized throughout this appeal. If they had called these supposed problems to the witnesses' attention during the hearing, the witnesses would have an opportunity to agree or disagree with Petitioners' theories and to explain why. And the Respondents would have had the opportunity to seek additional information or clarification from the witnesses. Instead the Petitioners said nothing and now contend that *the witnesses'* silence is fatal to Respondents' case. Petitioners' strategy should not be countenanced by the Board when they bear the evidentiary burden.

In any event, Petitioners' attacks on the PIC's data misconstrue the document. The PIC is nominally a proposal, but it went further than that in this case. EA specifically noted that it had already conducted the first year of the two-year study and presented the data that had been collected to the Agency. (R:1216.) Recognizing that the weight of this evidence clearly supports the Agency's decision, the Petitioners again throw up a smoke screen that this first year of data was "not subject to either quality control/quality assurance protocols or the rigors of actual scientific analysis." (Pet'r's Post-Hearing Br. at 13.) First, there is no such statement in the PIC document. Second, the PIC document expressly discusses QA/QC procedures. (R:108-09.) Third, in pre-hearing discovery, the Petitioners could have deposed the EA authors of this study to question them on their QA/QC procedures and their analysis of the data. Petitioners did not do so. And finally, Petitioners' bald speculation is a completely unreasonable inference to draw: EA was collecting this data for the purpose of satisfying the "Comprehensive Demonstration Study" requirement of the original Phase II Rule. 40 C.F.R. § 125.95(b) (2005). This is why the proposal *has* an entire section documenting its QA/QC procedures. For all of these reasons, Petitioners' theory that EA would be paid by MWGen to conduct a legally required study in a way that did not satisfy industry QA/QC standards is implausible and has no support in the permit record.

4. The Waukegan Station permit is not invalidated by the lack of a formal description of the local BIP.

Petitioners insist that the AEL renewal was in technical error, because the Agency never specifically defined the BIP or "evaluate[d] whether a BIP still exists." (Pet'r's Post-Hearing Br. at 16.) There is, however, no such requirement in Subpart K, which does not dictate what kind of evidence can be used to establish the absence of appreciable harm for a renewed AEL. *Compare* 35 Ill. Adm. Code 106.1115(a) (setting specific information requirements for *new* thermal AELs,

including a proposed representative important species list). Nor is there such a requirement in the federal regulations that Subpart K was modeled on. In fact, the federal regulations leave permit writers free to select whichever portions of information used to make a *de novo* thermal demonstration they would find most helpful in making a renewal determination. 40 C.F.R. § 125.72(c).

The Agency was free to establish the absence of appreciable harm to the BIP through indirect evidence, particularly when the evidence showed that the 1978 studies covered multiple trophic levels of aquatic life (*e.g.*, fish, zooplankton), the post-2000 information in the permit record showed no significant changes in the aquatic life other than declines unrelated to industrial discharges, and the Waukegan Station was discharging 39% less heated effluent. *See in re Seabrook Station NPDES Permit*, 1977 WL 22370, at *11 ("No hard and fast rule can be made as to the amount of data that must be furnished. Much depends on the circumstances of the particular discharge and receiving waters."); U.S. EPA, *Review of Water Quality Standards, Permit Limitations and Variances for Thermal Discharges at Power Plants*, EPA Doc. 831-R92001, at 6-7 (Oct. 1992) ("Although facilities engage in a great deal of research and data collection to initially acquire a [thermal AEL], the amount of data required by the permitting authority to support reissuance . . . usually is minimal.") (Attachment B to MWGen's Post-Hearing Comments).

The evidence included the Board's findings that the Waukegan Station did not pose a harm to the BIP in 1978, the USGS's 2009 finding that declines in prey species were related to nonindustrial factors, similar findings provided by the IDNR and the PIC's impingement data indicating that the composition of local species had not dramatically changed. (R:1-2, 618, 416, 1216.) Petitioners' contention that a Subpart K renewal cannot be supported by substantial

evidence without the performance of entirely new aquatic studies is not consistent with the text of Subpart K, with the federal regulations it was based on, nor with the purpose of creating "streamlined" renewal procedures for low-risk dischargers like the Waukegan Station. See *Agency's Statement of Reasons*, R13-20, at p. 10 (June 20, 2013) (Attachment A to MWGen's Post-Hearing Brief).

C. The Board Should Again Reject Petitioners' Meritless Arguments That the Agency Lacked the Authority to Renew AELs Prior to the Promulgation of Subpart K and That Subpart K's Promulgation Invalidated all Pre-Subpart K Thermal AELs.

Petitioners' post-hearing brief rehashes legal arguments from their summary judgment briefs insisting that the Agency was not empowered to renew thermal AELs prior to the enactment of Subpart K and that no thermal AEL established prior to Subpart K's 2014 enactment can be renewed. (Pet'r's Post-Hearing Br. at 17-19; Pet'r's Mot. S.J. at 20.)[8]

The result of applying Petitioners' incredible argument is that every thermal AEL granted by the Board and renewed prior to the adoption of Subpart K is invalid and void. That certainly will shock Illinois thermal AEL permittees, given that there was absolutely no mention or forewarning at any point in the Subpart K rulemaking that the adoption of the proposed Subpart K rules was intended to void all pre-existing thermal AELs. Applying Petitioners' argument to the facts here, their contention is that the 1978 Waukegan Station Thermal AEL lasted only 282 days, because it "expired" when the permit was renewed by the Agency in 1979. (See R:1; MWGen Post-Hearing Br., Attachment H.) Although the Agency included the Thermal AEL in the 1979 NPDES permit, and in all subsequent NPDES permits, Petitioners contend that each renewal was legally void.

[8] Petitioners rely on the following "pursuant to" language in Section 106.1180(a) of Subpart K: "The permittee may request continuation of an alternative thermal effluent limitation granted by the Board, pursuant to this Subpart, as part of its NPDES permit renewal application." 35 Ill. Adm. Code 106.1180(a) (emphasis added).

Petitioners provide no reason why the Board would have wanted to require all thermal AELs in Illinois to be scrapped and to undergo new demonstration proceedings in the wake of Subpart K. Nor do they explain how the Agency could have proposed, and the Board could have enacted, such a radical policy without ever indicating their intent to do so during the rulemaking process for Subpart K.[9]

Although the Board did not explicitly rule on this issue at summary judgment, and excluded it from the scope of the October hearing, its Order made legal findings fatal to Petitioners' theory. (See Board Order, at 11 n.20.) In analyzing whether Subpart K could be retroactively applied to MWGen's 2005 renewal application, the Board considered whether Subpart K had created a new AEL renewal requirement that had been absent from the applicable regulations in 2005. (Board Order at 11.) It ruled that renewal procedures had already existed in federal regulations, including 40 C.F.R. § 125.72(c), implying that these provisions had governed MWGen's 2005 renewal application. (Board Order at 11 n.19.)

Section 125.72 places the renewal power in the control of the state "Director," which in Illinois is the Agency: "The Agency is designated by statute as the State's water pollution control agency for purposes of the Federal Water Pollution Control Act." (MWGen's Post-Hearing Br., attachment C, pp. 1-2.) Thus, Petitioners' argument that the Agency had no legal authority to

[9] Indeed, if the Board were to adopt Petitioner's interpretation, this failure to notify permittees of the invalidation of their thermal AELs would violate the Illinois Administrative Procedure Act's notice requirement. 5 ILCS 100/5-40(b)(3) (stating that first notice for new regulations must include "[a] complete description of the subjects and issues involved"). And for purposes of analyzing whether retroactive application of Subpart K violated MWGen's right to due process, retroactively invalidating the Waukegan Station's Thermal AEL would magnify the "degree of the burden imposed" on MWGen by the Board's action. (See MWGen's Post-Hearing Br. at 35.)

renew permits prior to 2014 cannot be reconciled with the Board's earlier legal findings---The Board has already ruled that this authority came from applicable federal regulations.[10]

At all ends, the Petitioners are using this new appeal to attack the conditions of all Waukegan Station NPDES permits between 1979 and 2000, even though "[a]s a general principle, a condition imposed in a previous permit, which is not appealed to the Board, may not be appealed in a subsequent permit." *Phillips 66 Company v. IEPA*, PCB 12-101, slip op. at 25 (Mar. 21, 2013). These collateral attacks are untimely and barred by Section 40(e)(1) of the Act. (MWGen Mot. S.J. at 29; MWGen Reply Mot. at 14.) The Petitioners make no attempt to respond to or even acknowledge this argument, because they cannot deny that they are pursing an impermissible collateral attack on these prior permits.

Nor is Petitioners' reading of the "pursuant to" language in Section 106.1180 compelling even in terms of syntax. Section 106.1180(a) merely says that permittees can request renewal of a thermal AEL using the procedures in Subpart K. The clause beginning with "pursuant to" is modifying the word "request," not the word "granted," as the Petitioners contend. They insist that the question is decided by the fact that typically, a clause will modify close words, rather than more remote ones, and so "granted" is the winner by proximity. (Pet'r's Reply Mot. S.J. at 23.) But in drafting Section 106.1180(a), the Agency (and the Board) recognized the potential for this misreading and put a comma in between "granted" and "pursuant to"—a standard signal

[10] The Board also could reach the same conclusion on different grounds. MWGen has previously advised that the federal regulations did not create a pre-Subpart K renewal requirement, because the Agency enforces state NPDES regulations, and not federal ones. (MWGen Reply Mot. S.J. at 17; MWGen Post-Hearing Br. at 34.) Thus, prior to the promulgation of Subpart K, thermal AELs were not "renewed" in Illinois NPDES permits; rather they constituted a standing order from the Board, and the Agency was obligated to issue permits reflecting the Board's finding that the permittee's discharges, subject to certain conditions, met the requirements of 35 Ill. Adm. Code 304.141(c). (See MWGen Reply Mot. S.J. at 13.) If the Board found that, prior to Subpart K, thermal AELs did not expire at the end of each permit cycle, this would provide an alternate basis for rejecting the Petitioners' contention that PCB 77-82 quietly self-destructed in 1979, the first time the permit was renewed.

that the Board wanted to break up any possible relationship between that word and the modifying clause. *In re K.B.J.*, 305 Ill.App.3d 917, 922 (1st Dist. 2009) ("The placement of the comma after the word 'parent' reinforces the separation of the language preceding and following the comma.").[11]

Simply stated, the Board did not enact Subpart K for the purpose of invalidating prior thermal AELs, and Section 106.1180(a) was drafted in a way that disavows Petitioners' alternate reading. Illinois law firmly rejects Petitioners' interpretation: "The cardinal rule of statutory interpretation is to ascertain and give effect to the intent of the legislature." *Krautsack v. Anderson*, 861 N.E.2d 633, 643 (Ill. 2006); *see also* 5 ILCS 70/1 ("In the construction of statutes, [the Illinois Statute on Statutes] shall be observed, unless such construction would be inconsistent with the manifest intent of the General Assembly or repugnant to the context of the statute."). Because MWGen does not wish to burden the Board further with extensive reargument of issues that it impliedly rejected at the summary judgment stage, especially when Petitioners' post-hearing brief does not respond to any of MWGen's earlier arguments, MWGen incorporates its prior arguments by reference. (MWGen Mot. S.J. at 30-31; MWGen Reply Mot. at 21-24.) In short, Petitioners' arguments fail both as a matter of common sense and as a matter of statutory construction, which in Illinois are related questions.

II. The Agency Reasonably Relied on Evidence in the Permit Record Showing That the Existing Cooling Water Intake Structure Met the Interim BTA Standard.

A. The Petitioners Do Not Meet Their Burden of Proof by Relying on the MWGen 2005 PIC Document.

The Petitioners contend that the Agency failed to sufficiently document its interim BTA finding "in the permit," which they say lacks detailed explanations of which alternative interim

[11] An extended discussion of descriptive versus restrictive clauses appears in MWGen's earlier briefing. (*See* MWGen's Resp. Mot. S.J. at 23-24 & n.15)

BTA technologies and operational changes were considered and rejected. (Pet'r's Post-Hearing Br. at 22.) But there is no requirement in the Reissued Phase II Rule that the permit include an express "interim BTA" finding or that it identify which specific characteristics in the intake structure constitute interim BTA. (Id.) The Petitioners provide no citation supporting their statement. The Agency had to conduct an "interim BTA" review, 40 C.F.R. § 125.98(b)(6), and it did. (Hearing Tr. at 85, 135.)

The Petitioners seek to confuse the issue by arguing that an Agency witness testified that the Agency never made an interim BTA determination. (Pet'r's Post-Hearing Br. at 21.) They claim that the witness said that there was no interim BTA "determination," but this is a complete mischaracterization of the testimony. (Id., citing Hearing Tr. at 46: "[T]he agency witnesses offered conflicting testimony about whether IEPA had even made the required interim BTA determination . . . .") The Petitioners actually questioned the Agency witness Mr. Rabins as to whether there were "interim BTA requirements" (not a BTA determination) in the permit:

> [Ms. Dexter, counsel for Petitioners:] Are there interim BTA requirements in this permit?
>
> A: No.

(Hearing Tr. at 46.)

A determination and a requirement in a permit are two different things: The Agency made an interim BTA determination that it was unnecessary to impose new interim BTA requirements in the form of new technologies or operational changes.[12] In fact, the Petitioners

[12] Technically, the permit's requirements that MWGen begin conducting the PIC study and that it properly maintain and operate the Intake Structure, are interim BTA "requirements," under 40 C.F.R. § 125.98(b)(6). For instance, both the Indiana Department of Environmental Management and the Executive Director of the Texas Commission on Environmental Quality considered similar interim BTA "requirements" in permits they reviewed. (MWGen's Post-Hearing Br. at Attachment E, at 118, & Attachment F, at 25.) Mr. Rabins may have mistakenly thought that these requirements in the MWGen permit did not rise to the level of an interim BTA requirement under the Phase II Rule.

concede that when asked if the permit contained an interim BTA "determination," Mr. Rabins testified that it did. (Pet'r's Post-Hearing Br. 21-22, citing Hearing Tr. at 85.) So did the other Agency witness, Mr. LeCrone. (Hearing Tr. at 135.)

What's more, the Petitioners *created* this supposed lack of documentation by staying silent on these details throughout the permit renewal process, when they repeatedly advised the Agency that a decade-long, hundred-million dollar closed-cycle cooling project was the technology required to satisfy the Phase II Rule requirements. (R:476, 1134.) At no point in this appeal have the Petitioners argued that the Agency gave insufficient consideration to the closed-cycle cooling technology that they proposed, nor to any other intake control technology or operational change recommended during the permitting phase.

The Petitioners cannot meet their burden of proof by arguing now, for the first time, that the Agency's Responsiveness Summary should have discussed the viability of every single technology listed in EA's 2005 PIC. (Pet'r's Post-Hearing Br. at 23-26.) Indeed, they do not identify even one technology on that list that could have plausibly met the interim BTA's requirement that the technology be cost-effective, unlikely to interfere with full BTA projects, and capable of being rapidly installed. *See U.S. EPA, Region II, Palo Seco Power Plant 316(b) Decision Document*, p. 37 (July 2014) (limiting interim BTA to technologies that "are relatively easy to implement, do not result in significant increases in costs, and are not permanent changes or preclude future decision-making . . . .") (Attachment D to MWGen's Post-Hearing Br.) They instead throw up their hands and insist, with no supporting facts or qualified expert opinion, that surely one of the technologies in EA's list would meet the interim BTA standard. (Pet'r's Post-Hearing Br. at 26.) This is a strategy for abandoning an evidentiary burden, not for satisfying it.

In any case, the Agency had no obligation to prepare an extensive discussion of the technologies in the PIC's list, especially when none of the participants in the permitting process (including the Petitioners) advocated these technologies as a possible interim BTA. Critically important here is the fact that the author of the list of technologies, EA, advised the Agency that *none* of these technologies would be viable on an interim basis because their cost-effectiveness could not be assessed until longer-term studies were completed. (R:1212-13.) The Agency reasonably relied on EA's assessment and was under no obligation to restate EA's conclusions in the Responsiveness Summary—especially not when those conclusions remained unchallenged during the permit proceeding. Once again, by presenting no contrary factual evidence or testimony identifying any technology that on an interim basis would have been technically feasible and effective, economically reasonable, and would not have been rendered useless based on the final BTA findings for this intake structure, Petitioners have failed to carry their burden of proof that the Agency's interim BTA determination was in violation of the Phase II Rule.

B. The Agency's Interim BTA Finding Was Supported by Substantial Evidence in the Permit Record.

The Agency relied on evidence in the permit record that a reasonable person would find adequate to support a determination that no new technology was necessary to meet the interim BTA standard. *See Am. Bottom Conservancy*, PCB 06-171, at 13-14. The permit record included historical impingement/entrainment mortality studies and newly collected impingement data indicating that conditions had not significantly changed since the intake structure's original BTA determination, and further demonstrating that any reductions in impingement/entrainment mortality would largely benefit invasive species. (R:1213, 1231.) Also, as noted above, MWGen's technical consultant EA had advised the Agency that after a review of over a dozen potential technologies, it had been unable to find any technologies that would be cost-effective.

(R:1212-13.) Finally, the USEPA, which created the interim BTA standard, informed the Agency that their final permit "provides the best professional judgment Best Technology Available determination for the cooling water intake structure as required by CWA § 316(b)." (R:622; Hearing Tr. at 147.) These favorable opinions from two sources with expertise in intake structures, along with a commonsense reading of operating data, is at minimum, "adequate" evidence to support the interim BTA finding.

1. The Agency did not err by relying on the findings of historical impingement/entrainment studies.

Again, the Petitioners decline to comment on key pieces of evidence—choosing to simply ignore the opinions of both the U.S. EPA and EA in their post-hearing brief. They do, however, launch attacks on the historical studies and the data from the PIC, insisting that both of these pieces of evidence should have been totally disregarded by the Agency. Of course, the Petitioners *have* to ask for the complete exclusion of this evidence: They have no evidence of their own to outweigh it. These attacks, however, are without merit.

In another unpersuasive attempt to convince the Board to reject supportive record evidence, the Petitioners again argue that the Agency's use of the findings of historical studies violates the Best Evidence Rule although, confusingly, they acknowledge that the "missing documents" exception of the Rule applies, because the original studies are unobtainable. (Pet'r's Post-Hearing Br. at 26.) It is hard to understand how the rule can be violated if an exception applies.

So after, in effect, acknowledging that the Agency's reliance on the historical findings did not violate any evidentiary rules, the Petitioners instead argue that the Board is the "fact finder" in this matter and must rule on what weight the historical studies should be given. (Pet'r's Post-Hearing Br. at 26-27.) But while the Board is positioned to rule on the weight

granted to hearing testimony, this appeal is not the time for determining and weighing facts from the permit record *de novo*. Instead, as Petitioners admit elsewhere, the question is whether the Agency had facts that "might" be "adequate" to support their permit decision. (Id. at 7.)

Even though the historical impingement/entrainment mortality studies seem to have been unavailable to the Agency at the time the permit record was being compiled, the Agency had received and relied on a summary of those findings contained in the 2005 PIC. (R:1213-14.) This reiteration of the historical findings was evidence "of a type commonly relied upon by reasonably prudent [people] in the conduct of their affairs." 5 ILCS 100/10-40(a). EA would have no reason to misrepresent the studies which, as far as it knew, were already in the Agency's possession. There is simply no basis to refute all of the evidence indicating that the information provided by EA was reliable, and the Agency did not err by factoring the historical findings into its interim BTA determination.

The Petitioners also allege that the findings of the historical studies were presented "out-of-context," and broadly argue that any permit will fail the substantial evidence standard if it relies on studies that are not presented in the permit record in their entirety. (Pet'r's Post-Hearing Br. at 27.) The accusation that either EA or the Agency is willfully distorting the results of the historical studies (which, it should be remembered, led to a finding that the 1978 intake structure met the BTA standard) is groundless. The allegation is especially inappropriate when the Petitioners chose not to make it at the October hearing when Agency witnesses were present to respond.

And although Petitioners' post-hearing brief seeks to offer their own reinterpretations of scientific data in the record, they declined to give the Agency witnesses the opportunity to respond to these interpretations of scientific data during the hearing—even though the witnesses

are qualified to offer such expert opinions, whereas Petitioners are not. Specifically, Petitioners' post-hearing brief highlights a minor point in the Responsiveness Summary that the historical studies only identified eggs and larvae associated with three species. (Pet'r's Post-Hearing Br. at 27.) After finding evidence in the record indicating that it is often difficult to precisely identify eggs and larvae by species (rather than by higher levels of taxonomy,) they insist that the Agency must be misinterpreting, not only the three-species finding, but all findings related to the historical studies. (Id.) Again, this was a question to pose to the Agency witnesses: The Petitioners cannot create expert testimony within a legal pleading. In fact, the Petitioners did not even ask the witnesses what role, if any, the three-species finding played in their interim BTA finding—so Petitioners cannot even explain what alleged harm was caused by this supposed misinterpretation.[13] Again, the Petitioners are seeking to dodge their evidentiary burden by accusing the Agency of failing to respond to questions that the Petitioners never posed in the first place.

2. The Agency did not err by utilizing the findings of the PIC Study.

Petitioners contend the 2005 PIC data was irrelevant for its specifically intended purpose: assessing the impingement mortality of the intake structure. (Pet'r's Post-Hearing Br. at 28.)[14] As

[13] Similarly, the Petitioners find error in the Agency's description of the Intake Structure, because the description lists some design features that one of the two Agency witnesses did not connect to the protection of aquatic life. (Pet'r's Post-Hearing Br. at 23.) But, the Petitioners make clear that their objection boils down to the Agency not explaining how the existing specifications of the Intake Structure "compared to other available options." (Id.) Again, the question before the Agency was not whether better technologies existed, but whether those technologies met the interim BTA standard after being assessed by cost-effectiveness, installation time, and interference with future BTA projects. The Agency was credibly advised that no such technologies were justified by the available impingement data, and its conclusion was independently endorsed by the U.S. EPA. (R:622.) Mr. Rabins' supposed difficulty in explaining on the spot the merits of different travelling-screen systems is more a reflection of the fact that the Petitioners never asked him to provide that information during the permitting phase.

[14] The Petitioners argue that the 2005 PIC study's collection of a year of fish data was also irrelevant to the question of whether the Waukegan Station's thermal effluent caused appreciable harm. Hence, it is difficult to comprehend whether there is any issue for which Petitioners would concede this data has relevance.

MWGen noted above, the Petitioners are incorrect to suggest that the first year of this two-year study was conducted with no quality assurance measures and is otherwise "unsubstantiated." (Id.) The data was collected for the purpose of being relied on to meet the "Comprehensive Demonstration Study" requirement from the original Phase II Rule, not as aimless busywork. In fact, the only reasonable conclusion to draw from EA's discussion of QA/QC procedures in the PIC is that it was *following* those procedures; not that it ignored them.

Again, the Petitioners have had years to provide expert testimony challenging EA's methodology and data. Because expert testimony and expert opinions in the record support the Agency's permitting decision, providing contrary testimony is indispensable to meeting Petitioners' burden of proof on appeal. The post-hearing, biased accusations of Petitioners' counsel that the PIC data is "unreliable" and "unsubstantiated" is not an adequate substitute. *See Glasgow*, 2002 WL 392181, at *3 (upholding hearing officer's rejection of medical opinion proffered by laypersons). And their complaint that the data "lacked scientific interpretation and analysis" does not even explain what such a process would consist of, or to what degree it would improve the reliability of the PIC data. (Pet'r's Post-Hearing Br. at 28.) Nothing in the permit record disputes EA's findings that the modern impingement studies indicated that the composition of the species affected by the Intake Structure had not significantly changed since 1978 and that reductions in impingement mortality would benefit invasive species primarily. Thus, the Agency reasonably considered the PIC data in reaching its interim BTA determination.

C. Petitioners Do Not Meet Their Burden to Show That the Permit Should Have Required Interim Operational Changes.

Petitioners briefly contend that the Agency did not adequately document the absence of operational changes that would meet the interim BTA standard. (Pet'r's Post-Hearing Br. at 23.) They do not argue that the Agency ignored any operational changes that the Petitioners proposed

during the permitting phase. And, now on appeal, the only operational change suggested by the Petitioners is the reduction of the intake velocity from 2.0 ft/sec to 0.5 ft/sec. (Id.) However, consistent with Petitioners' pattern of confusing the "full BTA" and "interim BTA" standards in their filings and during the hearing, they now confuse technologies applicable to new facilities, not existing ones like the Waukegan Station. The 0.5 ft/sec intake velocity demanded by the Petitioners comes from a guidance document that is explicitly for *new* facilities. (Id., citing R:1059.)

So once again, the Petitioners are demanding that the Agency look to a closed permit record to justify the rejection of an operational change that was never proposed during the permitting phase and which their own citation discusses as appropriate only for new facilities. And again they dodge their own evidentiary burden, supplying none of the information on cost, installation time, or design footprint that would be necessary to evaluate this operational change under the interim BTA standard. Indeed, the Reissued Phase II rule suggests that this operational change is *not* a viable interim BTA candidate: Like closed-cycle cooling, achieving an intake velocity of 0.5 ft/sec is one of the technologies to be considered only *after* full BTA studies are completed. *See* 40 C.F.R. § 125.94(c)(1)-(2).

U.S. EPA's conclusion in the Reissued Phase II rule that achieving significant reductions in intake velocity is a serious undertaking, comparable to an expensive, multi-year, conversion to closed-cycle cooling, makes sense. Although Petitioners never specifically say what operational changes will achieve a 75% reduction in intake velocity, reducing the Waukegan Station's total flow rate by 75% would appear to be the only viable method. Requiring the Waukegan Station to derate by roughly 75% (the record suggests that the Station's design flow rate and heat-rejection rate have a 1:1 correlation) was not a serious option for meeting interim BTA—it would have

made continued operation economically impossible. The Agency was not required to discuss the exclusion of the velocity-reduction option from the Responsiveness Summary, especially when no participant in the permitting process recommended this operational change, and both the permit record and federal regulations indicated that it was not a viable interim BTA technology.

III. If the Board Remands, Its Remand Instructions Should Allow the Agency to Issue a New Permitting Decision Addressing the Board's Concerns.

Alternatively, if the Board finds that the Agency did not reasonably conclude that the Thermal AEL should be renewed or that the § 316(b) interim BTA standard was satisfied, which MWGen submits it should not, the only proper and equitable remedy here would be to remand with instructions to the Agency to provide additional documentation justifying its permitting decision. On the § 316(b) issue, the Petitioners agree. (Pet'r's Post-Hearing Br. at 29.)

The Board should follow a similar approach if it overrules the permit's § 316(a) provisions. Remanding with instructions that the Agency conduct a *de novo* review, under the procedures in Subpart K, of MWGen's request to renew the Waukegan Station's Thermal AEL would be consistent with Board precedents. *See, e.g.*, *KCBX Terminals Company v. IEPA*, PCB 14-110, slip op. at 57 (June 19, 2014) ("KCBX's application is remanded to the Agency for additional consideration of the information in the application consistent with this order and with the requirements of the Act and applicable regulations."). This remedy would be particularly appropriate here, because both MWGen and the Agency had no notice that Subpart K applied to the issued permit They should have the opportunity on remand to comply with whatever additional information or documentation requirements the Board identifies pursuant to 35 Ill. Adm. Code 106.1180.

In addition to having the opportunity to conduct the permit review in compliance with newly applicable regulations, the Agency should be given the opportunity to review evidence

that was not in existence at the time of the original permit proceeding. MWGen has already begun conducting the new thermal studies required by the Agency, and will be able to provide additional information generated to date from those studies to the Agency. The Agency also would have the opportunity to address Petitioners' vehement demands for more information on the "missing" historical studies: During the pendency of this appeal, several of these studies were found in the records of an outside contractor, and would likely aid the Agency if necessary to satisfy Subpart K's demonstration provisions. Also, because the Petitioners did not raise many of the concerns they identify on appeal during the original permitting hearing, the Agency will be given the opportunity that they should have been given earlier to consider these issues and document their consideration in the permit record.

Petitioners' demand that the Board remand with instructions to require the Waukegan Station to meet general Lake Michigan thermal standards is unnecessary and unduly punitive. (See Pet'r's Post-Hearing Br. at 29.) The Waukegan Station cannot meet these standards and would be required to cease operations—this is why ComEd received the Thermal AEL in 1978. The Petitioners have not provided or identified a single piece of evidence showing that the Waukegan Station's Thermal AEL has changed in a way that is causing appreciable harm to the aquatic community. If their appeal identified a technical error in the Waukegan Station's permit, which it did not, that alone would not entitle them to remand instructions barring the Agency from correcting the error.

Finally, Petitioners insist that the Board impose a six-month deadline on the Agency's reevaluation if the permit is remanded on either of their two claims. (Id. at 29.) Because the Board has not yet entered any ruling, if there is a remand to the Agency, the extent of the issues and additional information to be reviewed and evaluated by the Agency upon remand are not yet

known. Hence, there is no reasonable basis, until the Board rules and directs the Agency as to the scope of the remand, on which to determine whether any specified period of time is reasonable.

Petitioners cite no precedent for such an order. Nor do they cite what provision in the Act or Board regulations empowers the Board to dictate a specific deadline. There are also no specified deadlines for Agency permitting decisions in either Subpart K or the Reissued Phase II Rule.

MWGen does not raise these concerns regarding Petitioners' proposed six-month deadline for the purpose of delay. MWGen already has been prejudiced by Petitioners' pursuit of this appeal because its pending requests to modify the Waukegan Station NPDES Permit in order to make improvements, such as adding a reverse osmosis wastewater treatment system, are being held by the Agency pending the conclusion of this appeal. The reduction in pollutant loading and improved Station operations that will result from these improvements are being delayed unnecessarily due to this third-party appeal. Hence, MWGen has no interest whatsoever in postponing whatever actions may become necessary to allow the Waukegan Station NPDES Permit to become "final" so that the Agency will then process these pending improvements permit modifications. However, even with this strong desire and motivation to speed up the pace of this appeal's conclusion, MWGen questions whether it is appropriate for the Board to mandate a specific deadline for the completion of any remand order directives other than to urge the Agency to proceed with all reasonable diligence to do so.

CONCLUSION

The Agency reached its permitting decision after a nearly decade-long permit review, a well-attended public hearing, full notice and comment, and vetting of its proposed draft permit by the U.S. EPA. This appeal reviews whether the evidence in this case might reasonably lead a

person to the same conclusion. The permit record shows that the Waukegan Station's thermal discharges presented no harm to the aquatic community in 1978, and that the Waukegan Station has dramatically reduced the amount of heat it discharges since then. The record also contains credible expert opinions that declines among prey fish in the lake are not caused by the Waukegan Station's Thermal AEL, or to industrial activity generally. Finally, the permit record shows that the Intake Structure continues to affect primarily invasive species, just as it did in 1978, when it was found to meet the BTA standard. And nothing in the record indicates that a new technology or operational changes could satisfy the interim BTA standard.

Petitioners have not presented facts from the permit record outweighing the considerable evidence supporting the Agency's permitting decisions. They have not shown that the Waukegan Station's decreased thermal output was a "material change" or that it caused appreciable harm to the aquatic community. Nor do they even present a plausible explanation for how this could be possible. They have also declined to identify any new Intake Structure upgrades that meet the interim BTA standard. And, to the extent that they offer a lower intake velocity as a possible operational change (they offer only the result, and do not explain what operational changes could have produced it), they give no reason to believe that this change could be implemented without shuttering the Station entirely.

In sum, Petitioners are criticizing the Agency for failing to address not only unsubstantiated theories and contentions, but ones they are only presenting for the first time on appeal and for which they failed to provide testimony or supporting documentation during the October 5, 2016 hearing. The Act implicitly warns that allowing unpreserved claims like this to escape dismissal is unfair to the Agency, which should be given a chance to evaluate the concerns of permittees and third-parties before the permit is issued. It is also prejudicial to the

permittee, which will have no idea how to satisfy the documentation provisions of Subpart K unless it knows the questions being raised by interested parties. If the Board is not inclined to revisit its decision on standing, it should at least block Petitioners' efforts to secure an appellate victory by exploiting alleged "gaps" in the permit record that *they* created.

Dated: December 14, 2016

Respectfully submitted,

MIDWEST GENERATION, LLC

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CERTIFICATE OF SERVICE

I, the undersigned, certify that I have served the attached Respondent Midwest Generation, LLC's Reply to Petitioners' Post-Hearing Brief, by U.S. Postal Service by First Class Mail, postage prepaid, upon the following persons:

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