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 Pre-Hearing Brief of Respondent, Midwest Generation, LLC, a copy of which is herewith served upon you.

Dated: September 16, 2016

MIDWEST GENERATION, LLC

By: /s/ Susan M. Franzetti

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CERTIFICATE OF SERVICE

I, the undersigned, certify that I have served the attached Pre-Hearing Brief of Respondent, Midwest Generation, LLC, by U.S. Postal Service by First Class Mail, postage prepaid, upon the following persons:

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PRE-HEARING BRIEF OF RESPONDENT MIDWEST GENERATION, LLC

The overriding issue in this third party permit appeal is whether the Petitioners have met their burden of proof. "Section 40(e)(3) of the Act unequivocally places the burden of proof on the petitioner, regardless of whether the petitioner is a permit applicant or a third-party." *Prairie Rivers Network v. IEPA and Black Beauty Coal Co.*, PCB 01-112, slip op. at 8 (Aug. 9, 2001) (citing 415 ILCS 5/40(e)(3)). In a third-party challenge to a NPDES permit, the third party must prove that "the issuance of the permit violates the Act or Board's regulations." *NRDCv. IEPA and Dynergy Midwest Gen., Inc.*, PCB 13-17, at 36 (Jun. 5, 2014). The Petitioner alone bears the burden of proving that the Agency's Waukegan Station permitting decision was not supported by substantial evidence. *Prairie Rivers Network*, PCB 01-112, slip op. at 9 (*citing Waste Mgmt., Inc. v. IEPA*, PCB 84-45, PCB 84-61, PCB 84-68 (November 26, 1984) (consolidated)). To date, the Petitioners have not shown that they can satisfy their burden of proof.

In examining what constitutes "substantial evidence" for purposes of administrative decisions, the Board has stated that "the main inquiry is whether on the record the [A]gency could reasonably make the finding." *Waste Management, Inc.*, PCB 84-45, slip op. at 9. Midwest Generation, LLC (MWGen) submits that the evidence will show that the Agency reasonably made the finding, consistent with the requirements of the Illinois Subpart K regulations, that the Waukegan Station's thermal alternative effluent limit ("AEL") should be continued and also reasonably concluded that the Station's cooling water intake structure

satisfied the applicable "interim BTA" standard under the 316(b) federal Clean Water Act regulations.

ISSUES TO BE ADDRESSED AT HEARING

In its April 7, 2016 Opinion and Order on the parties' cross-motions for summary judgment, the Board specifically identified the following factual issues related to the renewed AEL in the Waukegan Station's NPDES Permit and directed the parties to address them at hearing:

1. Pursuant to the requirements of Section 106.1180(d) of Subpart K, did the IEPA consider whether:

   - "the nature of the thermal discharge has changed materially"?; and

   - "the alternative [effluent] limitation granted by the Board has caused 'appreciable harm to a balanced, indigenous population of shellfish, fish, and wildlife' in Lake Michigan"? (April 7, 2016 Opinion and Order at p. 12)

2. "Does the record show that the Facility met interim BTA requirements, as required by [40 C.F.R.] § 125.98(b)(6)" regarding cooling water intake structures? (Id. at p. 13)

As requested by the Hearing Officer, these hearing issues are further addressed below.

I. Pursuant to Section 106.1100 of the Subpart K regulations, the IEPA considered and reasonably concluded there was not a "material" change in the Waukegan Station's thermal discharge.

The permit record shows that the IEPA expressly considered and reasonably concluded that the Waukegan Station's thermal discharge did not materially change. The relevant facts show that the thermal discharge did not increase, either in temperature or flow volume, after the Board's granting of the AEL. If anything, the facts show that the thermal situation improved over time. The Board expressly conditioned the 1978 Order granting the AEL on the Station's compliance with both maximum heat rejection and flow rates. As the permit record shows, these two key factors improved significantly since the 1978 AEL was granted, due largely to the shutdown of two of the generating units that were operating at the time the AEL 1970's thermal studies presented to the Board were performed:

	Mid-70's	Current	Change
No. of Units (Gross Generating Capacity in Megawatts (MW))	4 (1016 MW)	2 (742 MW)	-25% reduction in generating capacity
Design Flow Capacity (Million Gallons per Day (MGD)	1,092	686	-37%
Heat Rejection Rate	5.301 x 10^9 BTU/hr	3.230x10^9 BTU/hr	-39%

The Illinois Subpart K regulations, 35 Ill. Admin. Code 106.1100 *et seq*., allow for streamlined renewals, even when a permittee's thermal discharge has changed, provided the change is not a "material change." The Subpart K regulations do not define a "material change." Certainly, this phrase cannot reasonably be interpreted to mean "any change," because that is not what "material" means. Further, under established rules of construction, we must assume the Board used the word "material" deliberately and it cannot properly be ignored. Similarly, in the context of a 316(a) thermal variance, a "material change" does not include a change that actually results in a reduction in the levels of the two key maximum rates, the flow volume and heat-rejection rates, on which the Board expressly conditioned the thermal AEL. Subpart K was never intended to punish permitees who make changes that improve the key characteristics of a thermal discharge. The Agency properly applied the Subpart K streamlined renewal procedures after reaching the reasonable conclusion that a "material change" had not occurred in the Waukegan Station thermal discharge.

Petitioners offer only pure speculation, and no supporting facts, that a "material change" occurred. They speculate that the reduced flow and heat rejection rates of the Waukegan Station's thermal discharge *might* result in the redirection of the thermal plume into an unspecified area of shoreline habitat that perhaps the 1978 thermal plume studies did not evaluate.[1] Petitioners provide no factual support for their contention because they never presented it during the permitting process. The record contains no information that would support the hypothesis that there has been a material change in the location of the plume that puts

[1] Pet'r's Mot. Summary Judgment, at 28.

it beyond the reach of the extensive studies performed to support the original AEL.[2] Because Petitioners have not said where they think the plume may have moved to, they have no evidence that the plume affects a different, more thermally sensitive aquatic community than the community studied, and considered by the Board, in the 1978 AEL proceeding. Certainly, the record contains no factual support for why the aquatic population would be harmed by a thermal discharge that gives off 39% less heat and whose flow volume has been reduced by 37% since the Board found it had "virtually no" ecological impact.

The Petitioners have failed to prove that the reduced heat rejection and flow rates of the Waukegan Station thermal discharge constitute a "material change" within the meaning of the Subpart K regulations. The record instead shows that the IEPA reasonably concluded that the nature of the thermal discharge had not changed materially so as to prevent the renewal of the AEL.

2. The AEL Granted by the Board Has Not Caused Appreciable Harm To The Lake Michigan Aquatic Community.

In its decision granting the 1978 AEL, the Board found that the Waukegan Station's thermal discharges cause "virtually no" ecological harm. As described above, the Station has since reduced its heat rejection rate by 39% and its discharge flow volume by 37%. Even Petitioners have not contended that the decreased heat rejection rate itself caused ecological harm—nor would the record support such an incredible finding.

The Board also has generally found that power plants' impacts on Lake Michigan are heavily localized. *In the Matter of Thermal Standards, Lake Michigan*, R70-2, slip op. at 1-715 (June 9, 1972) ("Unless it is located so as to interfere with spawning or migration, a single isolated 1000 MW plant will have local effects as noted above but will not upset the balance of the lake as a whole."). The IEPA considered whether any evidence of harm to the aquatic population had occurred which might be attributable to the Waukegan Station thermal discharge. The permit record shows that there were only *lakewide* changes causing *lakewide* impacts to aquatic communities, particularly the introduction of new invasive species which would not be

[2] MWGen maintains its position that this argument goes beyond the permit record and the Petitioners are barred by Illinois law from raising this argument for the first time on appeal. See 415 ILCS 5/40(e).

part of a "balanced, indigenous population" that is protected under § 316(a)) of the Clean Water Act and the Subpart K regulations.

There is no factual information in the permit record indicating, let alone proving, that the Waukegan Station thermal discharge was causing appreciable harm. In fact, the studies documented in the record show that the opposite is true: Not only does Waukegan Harbor show the same community changes seen in parts of the lake hundreds of miles away, the studies also show that many indigenous ish populations actually *grew* in size after the Board granted the AEL, only to suffer declines in later decades.

To the extent that the Petitioners might suggest that Subpart K's AEL renewal requirements could only be satisfied by the performance of detailed studies specific to Waukegan Harbor, they are mistaken. Subpart K outlines a "streamlined" renewal process, which exists as an *alternative* to the exhaustive studies that must be conducted to obtain a new AEL. The Board modeled Subpart K on the federal § 316(a) thermal AEL regulations. The IEPA relied appropriately on a 1992 U.S. EPA guidance indicating that the amount of authority needed for reissuance of an AEL "usually is minimal." The Agency reasonably based its no "appreciable harm" finding on documentation showing: (1) peer-reviewed studies in the record tracing Lake Michigan's ecological problems to non-industrial sources; (2) the findings of the Illinois Department of Natural Resources that no appreciable harm was being caused by industrial sources; (3) the Board's 1978 finding of "virtually no" harm, and (4) undisputed data from MWGen regarding its reduced thermal discharges.

3. The Agency's Interim BTA Finding for the Station's Cooling Water Intake Structure was based on a Reasonable Interpretation of the Permit Record.

Section 316(b) of the Clean Water Act requires that "the location, design, construction, and capacity of cooling water intake structures reflect the best technology available ['BTA'] for minimizing adverse environmental impact." The U.S. EPA only recently, in 2014, established regulations governing how BTA determinations are made. However, as the Board correctly noted in its April 7, 2016 Opinion and Order, the extensive studies required to make a "full BTA"[3] determination take more than three years to complete. (Opinion and Order at p. 14.) Because of

[3] The term "full BTA" does not exist in the new 316(b) regulations, but was crafted by the Board to avoid confusion with references to "interim BTA." (Opinion and Order at p. 13)

this, U.S. EPA's new 316(b) rules for cooling water intake structures impose limited, "interim BTA," requirements on permits that, like Waukegan Station's, were applied for before October 2014. Relying on the record before it, the Agency reasonably concluded that the Waukegan Station's intake structure meets the "interim BTA" standard.

In its April 7th Opinion and Order, the Board found that the Waukegan Station's NPDES Permit is subject to the "interim BTA" standard, not the "full BTA" standard that is applicable only after the required studies have been completed. (Opinion and Order at p. 15.) The Petitioners did not address the "Interim BTA" standard in their appeal petition[4] and they wrongly interpreted "Interim BTA" to mean the same thing as "full BTA" during the cross-motions for summary judgment. Thus, MWGen still does not know how Petitioners intend to satisfy their burden to prove that IEPA erred in concluding that the Waukegan Station's cooling water intake structure met the "interim BTA" requirement.

The interim BTA standard reflects the commonsense idea that BTA determinations for permit renewal applicants caught midstream by the 2014 U.S. EPA final impingement/entrainment rule should reflect the practical problems of requiring technological upgrades before the completion of studies determining whether ecological harm is being caused by the existing cooling water intake technology. Technologies that would potentially interfere with future modifications to the intake structure (the ones undertaken once the full § 316(b) studies are completed,) do not meet the interim BTA standard. *See* 79 Fed. Reg. 48300, 48327 (Aug. 15, 2014) ("If the compliance schedule is not harmonized, it is possible that a facility could install (at significant cost) coarse-mesh traveling screens that it might have to later retrofit with fine-mesh panels.") (preamble). Additionally, as the name implies, an "interim" technology must be able to be rapidly designed and installed.

Petitioners have not shown, as it is their burden to do, that there is a technological upgrade that the Waukegan Station should have been required to make to meet the interim BTA standard. Nor is there reason to believe, based on the permit record, that such a technology exists

The Agency reasonably found that a 2005 Proposal for Information Collection ("PIC") study showed that the Waukegan Station intake structure's impact was limited to low-value

[4] MWGen maintains its position that this issue was not properly raised during the permit renewal process and the Petitioners are barred by Illinois law from raising this argument for the first time on appeal. See 415 ILCS 5/40(e).

alewives, which were being impinged at the same rate that they were in 1978. So, the Agency reasonably concluded that there was no new technology available to MWGen that could be quickly installed, would not interfere with future projects, and that would provide appreciable benefits to the aquatic community. Therefore, the renewal of the Waukegan Station's NPDES Permit because its cooling water structure satisfied the applicable "interim BTA" standard was consistent with and did not violate applicable law and regulations.

Respectfully submitted,

Dated: September 16, 2016

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