#### BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

NATURAL RESOURCES DEFENSE COUNCIL PRAIRIE RIVERS NETWORK, and	)
SIERRA CLUB,	j j
Petitioners,	<ul> <li>) PCB 13-17</li> <li>) (Third-Party NPDES Permit Appeal)</li> <li>)</li> </ul>
v.	)
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY and DYNEGY MIDWEST	) ) )
GENERATION, INC.,	)
	)
Respondents.	)

#### NOTICE OF FILING

TO:

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PLEASE TAKE NOTICE that I have today electronically filed with the Office of the Clerk of the Pollution Control Board, the attached **Respondent Dynegy Midwest Generation's Cross-Motion For Summary Judgment** and **Memorandum Of Law In Opposition to Petitioner's Motion For Summary Judgment And In Support Of Respondent Dynegy Midwest Generation's Cross-Motion For Summary Judgment**, copies of which are herewith served upon you.

DYNEGY MIDWEST GENERATION, INC.,

By: Amy Antoniolli

Dated: February 24, 2014

Daniel Deeb Amy Antoniolli SCHIFF HARDIN LLP 233 South Wacker Drive Suite 6600 Chicago, Illinois 60606 Tel: 312-258-5500 aantoniolli@schiffhardin.com

#### **BEFORE THE ILLINOIS POLLUTION CONTROL BOARD**

NATURAL RESOURCES DEFENSE COUNCIL PRAIRIE RIVERS NETWORK, and	)
SIERRA CLUB,	)
Petitioners,	)
v.	<ul> <li>) PCB 13-17</li> <li>) (Permit Appeal – NPDES)</li> </ul>
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY and DYNEGY MIDWEST GENERATION, INC.,	) ) )
Respondents.	)

#### RESPONDENT DYNEGY MIDWEST GENERATION'S CROSS-MOTION FOR SUMMARY JUDGMENT

Respondent Dynegy Midwest Generation, Inc. ("DMG"), by its undersigned counsel, respectfully requests that the Illinois Pollution Control Board (the "Board") enter an order granting DMG's Cross Motion for Summary Judgment pursuant to 35 Ill. Adm. Code § 101.516 for the reasons set forth in DMG's Memorandum Of Law In Opposition To Petitioners' Motion For Summary Judgment And In Support Of Respondent Dynegy Midwest Generation's Cross-Motion For Summary Judgment, which DMG is contemporaneously filing.

WHEREFORE, Respondent, Dynegy Midwest Generation, Inc., respectfully requests that the Board enter an order granting its Cross-Motion for Summary Judgment

Respectfully submitted,

DYNEGY MIDWEST GENERATION, INC.

By: One of Its Attorneys

Dated: February 24, 2014

Daniel Deeb Amy Antoniolli SCHIFF HARDIN LLP 233 S. Wacker Drive, Suite 6600 Chicago, Illinois, 60606 Phone: (312) 258-5500

#### BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

NATURAL RESOURCES DEFENSE COUNCIL PRAIRIE RIVERS NETWORK, and	) )	
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V.	)	(Permit Appeal – NPDES)
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ILLINOIS ENVIRONMENTAL FROTECTION	,	
AGENCY and DYNEGY MIDWEST	)	
GENERATION, INC.,	)	
	)	
Respondents.	)	

#### MEMORANDUM OF LAW IN OPPOSITION TO PETITIONERS' MOTION FOR SUMMARY JUDGMENT AND IN SUPPORT OF RESPONDENT DYNEGY MIDWEST GENERATION'S CROSS-MOTION FOR SUMMARY JUDGMENT

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#### **INTRODUCTION**

Respondent Dynegy Midwest Generation ("DMG") respectfully submits this Memorandum of Law in Opposition to Petitioners' Motion for Summary Judgment ("Petitioners' Motion") and in support of DMG's Cross-Motion for Summary Judgment in favor of Respondents ("DMG's Motion") pursuant to 35 Ill. Adm. Code § 101.516. DMG will herein demonstrate that each of the four claims of Petitioners' Motion (reasonable potential, antidegradation, best professional judgment, and public participation) fail as a matter of law, that the administrative record underlying the Illinois Environmental Protection Agency's ("IEPA's") issuance of the NPDES renewal permit at issue (the "Record")<sup>1</sup> supports the IEPA's decision to issue the permit and that, accordingly, Respondents are entitled to summary judgment.

Petitioners' reasonable potential claim incorrectly posits that IEPA has duty to conduct a reasonable potential analysis in a vacuum – without any relevant effluent monitoring data from the facility. Part I below demonstrates that IEPA is not actually required to do so. IEPA had the discretion to instead condition a permit to require monitoring and allow for reopening based on that monitoring data. With respect to antidegradation (Part II below), the Record well-supports IEPA's conclusion that the proposed new discharge would not result in any detectable increased loading to the Illinois River, a water quality standard exceedance or prevent the continued attainment of an existing use. All four antidegradation criteria were satisfied. Petitioners' best professional judgment claim (addressed at Part III below) is premised on the mistaken view that IEPA had mandatory duty to impose a case-by-case TBEL when, in fact, such was wholly

<sup>&</sup>lt;sup>1</sup> Cited to throughout DMG's Motion as "R. at \_\_."

discretionary. Finally, Part IV establishes that no public participation requirements were violated or are properly at issue in this case.

Petitioners repeatedly contend that Respondents are, via the Permit, improperly transferring pollution from air to water.<sup>2</sup> Indeed, they assert that the purported transfer defeats the purpose of the "requirements underlying the installation of [DMG's] air pollution control equipment."<sup>3</sup> Those contentions ignore the facts that the Illinois Pollution Control Board ("Board") and IEPA expressly contemplated that ACI waste may be deposited in ash ponds, that leaching from that material into ash pond waters was not anticipated (See Part II.A, *infra*), and that effluent monitoring and limitations would be imposed as appropriate following evaluation. In truth, the Permit is entirely consistent with the intent of the *Mercury Rule*.<sup>4</sup>

#### <u>STANDARD OF REVIEW</u>

In a third-party permit appeal, "[t]he Board must review the entire record relied upon by IEPA to determine whether the third party has shown that IEPA failed to comply with criteria set forth in the applicable statutes and regulations before issuing or denying the NPDES permit."<sup>5</sup> "IEPA must comply with the Environmental Protection Act (415 ILCS 5/1 *et seq.* (West 2002)) and the Illinois Pollution Control Board's general water quality regulations (35 Ill. Adm. Code § 302.101 *et seq.*) to protect and maintain water quality standards in this state before issuing a

<sup>&</sup>lt;sup>2</sup> Memorandum of Law in Support of Petitioners' Motion for Summary Judgment ("Petitioners' Memo"), pp. 1, 26, 42.

<sup>&</sup>lt;sup>3</sup> *Id.* at 26.

<sup>&</sup>lt;sup>4</sup> During testimony before the Board, Ms. Willhite of the IEPA was asked whether mercury monitoring of ash pond effluent would be required if ACI sorbent was received in ash pond. She responded by saying that the Agency "would do an evaluation to see whether that constituent concern could be in the discharge and put limitations and monitoring requirements as appropriate." In the Matter of: Proposed New 35 Ill. Adm. Code 225 Control of Mercury from Large Combustion Sources (Mercury), R06-25, Testimony of M. Willhite, Jun. 22 and 23 Tr. pp. 502, 03, and 06.

<sup>&</sup>lt;sup>5</sup> *IEPA v. Ill. Pollution Control Bd.*, 896 N.E.2d 479, 487 (Ill. App. 3d 2008) (citing 40 ILCS § 5/40 (a)(1), (d) and *Prairie Rivers Network v. Pollution Control Bd.*, 781 N.E.2d 372 (Ill. App. 3d 2002)).

NPDES permit."<sup>6</sup> IEPA's decision to issue the permit must be supported by substantial evidence.<sup>7</sup> "This does not shift the burden away from the petitioner, who alone bears the burden of proof in this matter."<sup>8</sup> In examining what constitutes "substantial evidence" in reviewing administrative decisions, the Board has quoted a treatise stating that "the main inquiry is whether on the record the agency could reasonably make the finding.""<sup>9</sup>

Summary judgment is appropriate in a permit appeal "[i]f the record, including pleadings, depositions and admissions on file, together with any affidavits, shows that there is no genuine issue of material fact, and that the moving party is entitled to a judgment as a matter of law . . . . .<sup>10</sup> "In ruling on a motion for summary judgment, the Board 'must consider the pleadings, depositions, and affidavits strictly against the movant and in favor of the opposing party."<sup>11</sup> Summary judgment should be granted "when the movant's right to relief 'is clear and free from doubt."<sup>12</sup> A party opposing a motion for summary judgment must "present a factual basis which would arguably entitle [it] to a judgment."<sup>13</sup>

<sup>&</sup>lt;sup>6</sup> *Id.* at 485.

<sup>&</sup>lt;sup>7</sup> Prairie Rivers Network v. Envtl. Prot. Agency, PCB 01-112, slip op. at 7 (Aug. 9, 2001).

<sup>&</sup>lt;sup>8</sup> Des Plaines River Watershed Alliance, et al. v. IEPA, PCB 04-88, slip op. at 7 (Nov. 17, 2005) (citing Prairie Rivers Network v. IEPA and Black Beauty Coal Co., PCB 01-112, slip op. at 9 (Aug. 9, 2001); citing Waste Management, Inc., v. IEPA, PCB 84-45, 61, 68 (consol.), slip op. at 3-10 (Nov. 26, 1984)).

<sup>&</sup>lt;sup>9</sup> Waste Management, PCB 84-45, 61, 68 (consol.), slip op. at 9 (citing Davis, Administrative Law Treatise, Section 29.00-1 at 526 (1982 Supp.)).

<sup>&</sup>lt;sup>10</sup> 35 Ill. Adm. Code § 101.516(b); Des Plaines River Watershed Alliance, PCB 04-88, slip op. at 6.

<sup>&</sup>lt;sup>11</sup> Id. (citations omitted).

<sup>&</sup>lt;sup>12</sup> Id. (citations omitted).

<sup>&</sup>lt;sup>13</sup> Id. (quoting Gauthier v. Westfall, 639 N.E.2d 994, 999 (2d Dist. 1994)).

#### <u>FACTS</u>

The Havana Power Station (the "Havana Station") is an oil and coal-fired six-unit steam electric generating facility capable of generating approximately 675 megawatts.<sup>14</sup> The facility is located on the east bank of the Illinois River approximately two miles south of Havana, Illinois.<sup>15</sup> Its East Ash Pond System entails four ponds (1, 2, 3, and 4), placed into service from 1990 to 2003. At the time of the application and Permit issuance, these ponds were designed to operate in series with any wastewater from cell 1 flowing to cell 2, then to cell 3, then to the final polishing pond, and ultimately to Outfall 005.<sup>16</sup> Outfall 005 discharges to the Illinois River.<sup>17</sup>

On October 31, 2006, DMG timely submitted to the IEPA an application for reissuance of the NPDES Permit for its Havana Station, Permit IL001571, in accordance with 35 Ill. Adm. Code § 309.104 and 40 C.F.R. § 122.21.<sup>18</sup> DMG submitted a variety of information with that application, including but not limited to, required forms, analytical results for all process wastewater and storm water outfalls at Havana Station, and a list of boiler feedwater and wastewater treatment chemicals currently being used at Havana Station.<sup>19</sup> At the time DMG applied for its permit renewal, DMG included its expected construction of a dry scrubber (a/k/a, a spray dryer absorber or SDA) and an activated carbon mercury sorbent injection ("ACI") system at the Havana Station, as part of its application.<sup>20</sup> The scrubber is an air pollution control technology used to control sulfur dioxide pollution in the air. *Id.* The ACI system is also an air

<sup>19</sup> Id.

<sup>&</sup>lt;sup>14</sup> R. at 000012. The Havana Station's oil-fired units 1-5 are currently out of service and non-operational. The Havana Station's coal-fired unit, Unit 6, is capable of generating approximately 441 megawatts.

<sup>&</sup>lt;sup>15</sup> R. at 000428.

<sup>&</sup>lt;sup>16</sup> R. at 000024, 000429.

<sup>&</sup>lt;sup>17</sup> R at 000014.

<sup>&</sup>lt;sup>18</sup> R. at 000005-000404.

<sup>&</sup>lt;sup>20</sup> R at 000009.

pollution control technology that controls mercury emissions into the air.<sup>21</sup> As part of its permit application, DMG asked that the scrubber and ACI residues be added to the contributory waste stream listing for Havana Station's East Ash Pond System (Outfall 005).<sup>22</sup> The combined waste stream (sometimes referred to as "SDA residue" in the Record and herein commonly referred to as the "scrubber/ACI waste stream"), was estimated to be 25,000 tons per year. An estimated 2.6 tons of spent activated carbon per day was estimated to be within the 25,000 tons.<sup>23</sup>

Information provided to IEPA by DMG explained that mercury was expected to be discharged to the East Ash Pond System at the Havana Station at a rate of 0.0 to 0.6 pounds per day.<sup>24</sup> Because the equipment was not yet installed or operational, Havana Station effluent monitoring data concerning the proposed new scrubber/ACI waste stream was not available to DMG or IEPA during IEPA's consideration the requested renewal permit.

Subsequent to its submittal of the Havana Station permit renewal application, DMG continued to work with IEPA in the agency's review of that application. On April 27, 2010, DMG submitted additional information regarding discharges from the Havana Station in order to assist IEPA with its antidegredation assessment.<sup>25</sup> As part of this submittal, DMG directed IEPA to a variety of relevant information regarding the potential for increased loading at Havana Station, including but not limited to, a study by the Electric Power Research Institute of activated carbon injection, entitled *Activated Carbon Injection: Effect on Simulated Fly Ash Sluice Water* ("*EPRI Study*").<sup>26</sup> DMG also alerted IEPA to the appropriate outfall for possible future sampling

<sup>&</sup>lt;sup>21</sup> Id.

<sup>&</sup>lt;sup>22</sup> Id.

<sup>&</sup>lt;sup>23</sup> R. at 000529.

<sup>&</sup>lt;sup>24</sup> R. at 000010.

<sup>&</sup>lt;sup>25</sup> R. at 000506-000509.

<sup>&</sup>lt;sup>26</sup> R. at 000507.

of mercury for mercury sorbent residue discharge and advised IEPA the scrubber/ACI waste stream was to be placed within dry areas of pond 1 (and when full, pond 2), the most hydrologically distant areas of the East Ash Pond System from Outfall 005.<sup>27</sup> DMG also kept IEPA apprised of other changes at Havana Station and provided IEPA with additional relevant information for the NPDES permit application as it became available.<sup>28</sup> DMG submitted a supplement to the antidegradation assessment, further refining the proposed load increases on July 29, 2010.<sup>29</sup> The additional materials included an analysis of scrubber/ACI waste stream from the DMG's Baldwin Energy Complex to represent the scrubber/ACI waste stream that would later be generated at the Havana Station. Although the pond systems and ultimate discharges of the two stations are significantly different, the similarity of the air pollution controls made Baldwin Energy Complex sampling data the most representative data available.

IEPA relied on certain other materials in making its permit decision for Havana Station, as well. This included, among other items, comments submitted by the public and a 2006 United States Environmental Protection Agency ("U.S. EPA") report entitled *Characterization of Mercury-Enriched Coal Combustion Residues from Electric Utilities Using Enhanced Sorbents for Mercury Control*, February 2006, EPA-0600/r-06/008 (the "2006 U.S. EPA Study").<sup>30</sup> The *EPRI Study* and the 2006 U.S. EPA Study provided IEPA with relevant information regarding the potential impacts of ACI on waste streams at Havana Station.<sup>31</sup>

<sup>&</sup>lt;sup>27</sup> R. at 000508, 000654.

<sup>&</sup>lt;sup>28</sup> See, e.g. R. 000512-000527.

<sup>&</sup>lt;sup>29</sup> R. at 000528-000533.

<sup>&</sup>lt;sup>30</sup> Included in the Record as document #65 and cited to throughout this brief as R. Doc. #65, at \_\_\_." *Id.* at 000674-000691 (Responsiveness Summary), 000719-000844 (public hearing and comments); 000889-000986 (public comments).

<sup>&</sup>lt;sup>31</sup> See generally, id. at #65, 000991-1019.

IEPA held a public hearing on November 8, 2011 where it received public comment on a draft NPDES renewal permit for the Havana Station. On September 14, 2012, IEPA issued NPDES renewal permit IL0001571 for the Havana Station (the "Permit").<sup>32</sup> Among other requirements, the Permit was issued to include conditions requiring DMG to conduct quarterly monitoring of mercury at Outfalls 002, 003, and 005.<sup>33</sup> In addition, the Permit requires DMG to conduct biannual monitoring for a variety of additional parameters for which effluent monitoring information was not previously available, including arsenic, and selenium. Permit, Special Condition 21.<sup>34</sup> Special Condition 21 further specifies that "[t]he Permit may be modified with public notice to establish effluent limitations if appropriate, based on information obtained through sampling."<sup>35</sup> Additionally, the Permit may be modified at any time based on new information, which DMG is required to provide to the Agency under Standard Condition 8.<sup>36</sup> Petitioners appealed the issuance of the Permit on or about October 18, 2012.

#### <u>ARGUMENT</u>

#### I. IEPA WAS NOT REQUIRED TO CACULATE A REASONABLE POTENTIAL IN THE ABSENCE OF FACILITY-SPECIFIC EFFLUENT DATA.

IEPA did not violate the Act or any Board regulation by issuing the Permit without calculating a "reasonable potential" for mercury, arsenic, or selenium<sup>37</sup> when no effluent data for

<sup>35</sup> Id.

<sup>36</sup> R. at 000713.

<sup>&</sup>lt;sup>32</sup> R. at 000696-000716.

<sup>&</sup>lt;sup>33</sup> R. at 000706, Permit, Special Condition 8.

<sup>&</sup>lt;sup>34</sup> R. at 000711.

<sup>&</sup>lt;sup>37</sup> Petitioners' Memo alleges that the Agency did not address "numerous" "non-mercury pollutants associated with the ACI equipment" but do not list any other parameters beyond arsenic and selenium. Petitioners' Memo, p. 19. Those three parameters were, however, identified by U.S. EPA as ACI constituents of interest "based on input from EPA-OSW and EPA-OAPS." R. Doc. #65, 2006 U.S. EPA Study (defined at Part I.B, *infra*), at 40. Although other metals were also considered by the study (cadmium and lead), screening of those parameters "indicated low content and leaching concentrations below levels of concern . . . " R. Doc. #65, 2006 U.S. EPA Study, at 40.

those parameters was then available to the Agency.<sup>38</sup> To the contrary, IEPA acted consistently with applicable authority by considering available information and crafting the Permit with conditions requiring effluent monitoring and allowing later reopening to impose effluent limits if warranted by the monitoring data.<sup>39</sup> The Board should, therefore, deny Petitioners' Motion and grant summary judgment in favor of DMG finding that IEPA issued the Permit consistently with the Act and Board regulations.

## A. In the Absence of Facility-Specific Effluent Data, IEPA Had the Discretion to Issue the Permit with Monitoring Requirements.

It makes little sense for the Agency to conduct a reasonable potential analysis in the absence of data allowing it conduct that analysis reliably. As will be explained below, such has long been recognized by both U.S. EPA and IEPA. Under the Board's rules, "[e]ffluent limitations must control all pollutant or pollutant parameters . . . which the Agency determines are, or may be, discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard."<sup>40</sup> To calculate a reasonable potential for a given chemical parameter, the Agency typically uses historical effluent data from the permitted source for that parameter. Indeed, to DMG's knowledge, the Agency has never before calculated a reasonable potential in the complete absence of source-specific effluent data (no instances have been identified by Petitioners). Instead, the common practice is to impose monitoring requirements within a permit along with a reopening provision. As explained below, such practice by the Agency is entirely appropriate.

<sup>&</sup>lt;sup>38</sup> It has not been disputed that appropriate facility-specific effluent monitoring data for mercury, selenium and arsenic were unavailable to the Agency at the time of Permit issuance.

<sup>&</sup>lt;sup>39</sup> See R. at 000696-000716 (Permit, Special Conditions 8, 21 and Standard Condition 8); R. at 000684, 000688.

<sup>&</sup>lt;sup>40</sup> 35 Ill. Adm. Code § 309.143.

The same U.S. EPA guidance touted by Petitioners as legal authority, the U.S. EPA, *Technical Support Document For Water Quality-based Toxics Control*, EPA/505/2-90-001 (March 1991) (the "1991 U.S. EPA TSD") expressly reflects the discretion a permitting authority is afforded when considering a reasonable potential in the absence of source-specific effluent data.<sup>41</sup> In particular, Section 3.2 of the 1991 U.S. EPA TSD, entitled "Determining The Need For Permit Limits Without Effluent Monitoring Data For A Specific Facility," includes the following:

<u>If the regulatory authority so chooses</u>, or if the circumstances dictate, the authority <u>may decide</u> to develop and impose a permit limit for whole effluent toxicity or for individual toxicants without facility-specific effluent monitoring data, or prior to the generation of effluent data... When determining whether or not a discharge causes, has the reasonable potential to cause, or contributes to an excursion of a numeric or narrative water quality criterion for individual toxicants or for toxicity, the regulatory authority <u>can</u> use a variety of factors and information where facility-specific effluent monitoring data are unavailable.<sup>42</sup>

Plainly, this guidance, written as permissive rather than obligatory, contemplates that permitting authorities are to have considerable discretion (if, may and can) in deciding the information to consider in the absence of facility-specific effluent monitoring data. Petitioners' reasonable potential argument, however, inherently rewrites this plainly permissive text to be mandatory.

The 1991 U.S. EPA TSD goes on to specifically endorse the practice of imposing a

monitoring requirement when facility-specific effluent data is not available:

If the regulatory authority, after evaluating all available information on the effluent, in the absence of effluent monitoring data, is not able to decide whether the discharge causes, has the reasonable potential to cause, or contributes to, an excursion above numeric or narrative criterion for whole effluent toxicity or for individual toxicants, the authority should require while effluent toxicity or chemical-specific testing to gather further evidence. In such a case, the regulatory

<sup>&</sup>lt;sup>41</sup> Notably, 35 Ill. Adm. Code §309.143 mirrors the federal language for reasonable potential analysis located in 40 C.F.R. § 122.44. It was added to "clarify the relationship of water quality standards to effluent limits in NPDES permits without adding additional requirements." *In re Proposed Amendments to: Public Participation Rules in 35 Ill. Adm. Code 309 NPDES Permits and Permitting Procedures*, R03-19 at 29 (Sept. 4, 2003).

<sup>&</sup>lt;sup>42</sup> 1991 U.S. EPA TSD, at 50 (emphasis added).

authority can require the monitoring prior to permit issuance, if sufficient time exists, or it may require the testing as a condition of the issued/reissued permit.<sup>43</sup>

Other U.S. EPA guidance adds that a reopening provision may also be appropriate.

The permit writer . . . <u>could require the monitoring as a condition of the newly</u> <u>issued or reissued permit</u>. The permit writer <u>might also include a clause in the</u> <u>permit that would allow the permitting authority to reopen the permit and impose</u> an effluent limitation if the required monitoring establishes that there is reasonable potential that the discharge will cause or contribute to an excursion above a water quality criterion.<sup>44</sup>

IEPA has similarly acknowledged the importance of acquiring data before conducting a reasonable potential analysis for a pollutant.<sup>45</sup>

## B. IEPA Considered Available Reliable Information in Deciding to Issue the Permit with Monitoring Requirements.

Although there was no site-specific effluent data for the parameters at issue available to IEPA to review at the time of Permit issuance, the Record well-demonstrates that the Agency did review significant and reliable then-available information regarding ACI wastes.<sup>46</sup> An important part of the Record is the *EPRI Study*.<sup>47</sup> The primary objective of the *EPRI Study* was to "investigate the effect of activated carbon injection (ACI) for mercury flue gas control on the composition of the fly ash sluice water and ash pond settleability."<sup>48</sup> In other words, it was intended to assess the extent to which the spent ACI sorbent (with mercury and other metals

<sup>&</sup>lt;sup>43</sup> 1991 U.S. EPA TSD, at 51 (emphasis added).

<sup>&</sup>lt;sup>44</sup> U.S. EPA, *NPDES Permit Writers' Manual (2010)*, EPA-833-K-10-001, at 6-30 to -31 (Sept. 2010) (emphasis added).

<sup>&</sup>lt;sup>45</sup> See, e.g. IEPA, Met-South, Inc. NPDES Permit Responsiveness Summary, at 14 (June 18, 2010) available at http://www.epa.state.il.us/public-notices/2009/met-south-coal/responsiveness-summary.pdf (stating "[a] reasonable potential analysis can only be performed when actual data from the discharge is collected" and including condition requiring monitoring so that reasonable potential analysis could be performed following data collection).

<sup>&</sup>lt;sup>46</sup> See, e.g. R. Doc. # 65; 000531, 000990-1019. See also, R. at 000679-680, 000684, 000688 ("Using available information, the Agency reasonably concluded that it believed the contaminants did not pose a threat to water quality standards.").

<sup>&</sup>lt;sup>47</sup> *EPRI Study* at v, R. at 000994.

<sup>&</sup>lt;sup>48</sup> Id.

absorbed therein) has on ash pond discharges. To accomplish this, the study entailed laboratory fly ash sluicing experiments followed by settling studies to simulate fly ash sluicing followed by solids removals in an ash settling pond.<sup>49</sup> The study concluded that the addition of spent ACI sorbent did not increase ash pond concentrations of mercury and other studied volatile metals ("Concentrations of volatile metals (mercury, selenium, and boron) in the sluice water did not appear to be affected by the carbon addition.").<sup>50</sup> The Record also establishes that the Agency considered the *2006 U.S. EPA Study*, which stated that mercury is "strongly retained by the CCR [coal combustion residues] and unlikely to be leached at levels of environmental concern."<sup>51</sup> The information of those studies is consistent with considerable expert testimony heard by the Board in the rulemaking proceeding promulgating the Illinois *Mercury Rule*.<sup>52</sup> (See Part II.A, *infra*).

Petitioners complain that the *EPRI Study* and *2006 U.S. EPA Study* were preliminary.<sup>53</sup> That complaint fails to recognize that the studies are technically sound and represented the best scientific information available to the Agency at the time of Permit issuance regarding the effect of ACI sorbent wastewater in ash ponds. It was inherently reasonable for the Agency to have relied on them and to have imposed monitoring and reopening conditions within the Permit.<sup>54</sup> Not surprisingly, the Petitioners' public comments did not present any contrary scientific studies.

<sup>&</sup>lt;sup>49</sup> *Id.* at 000990-001019

<sup>&</sup>lt;sup>50</sup> Id. at 000990-001019

<sup>&</sup>lt;sup>51</sup> R. Doc. # 65at xiii; 000545.

<sup>&</sup>lt;sup>52</sup> Mercury Rule, R06-25 (Dec. 21, 2006).

<sup>&</sup>lt;sup>53</sup> Petitioners' Memo, p. 8.

<sup>&</sup>lt;sup>54</sup> See, e.g., U.S. EPA, Technical Development Document for the Proposed Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category, EPA-821-R-13-002, at 6-17 (April 2013) (citing U.S. EPA Study in its discussion of ACI system wastewater); NPDES Permit Writers' Manual (2010) at Ch. 4, p. 4-19 (providing that sources a permit writer could use for permit development include "[r]eference textbooks and technical documents that provide information about manufacturing processes and waste streams for specific industry categories.").

Petitioners also attempt to discredit the 2006 U.S. EPA Study as "forming the basis" for a proposed requirement of certain alternatives of U.S. EPA's proposed new *Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category; Proposed Rule*, 78 Fed. Reg. 34432 (June 7, 2013) (the "Proposed ELGs") for zero discharge with respect to ACI wastes streams.<sup>55</sup> That assertion is without basis – nowhere do the Proposed ELGs (or their Technical Support Document) expressly or implicitly discredit the 2006 U.S. EPA Study. Moreover, Petitioners' assertion ignores the critical fact that the Proposed ELGs were not available to IEPA at the time of Permit issuance. Furthermore, Petitioners' assertion ignores the fact that the Proposed ELGs present two proposed alternatives for comment that do not contemplate only a zero discharge control but instead posit continued application of only TSS and oil & grease limits for ACI waste streams (the Proposed ELGs include ACI carbon sorbent within its proposed definition of FGMC wastewater).<sup>56</sup>

With the *EPRI Study* and 2006 U.S. *EPA Study* in mind, IEPA reasonably stated as follows in the Permit Fact Sheet:

Mercury that has been removed from the air emissions is expected to stay in the sorbent in the settled ash in the pond. Between zero and 0.6 pounds of mercury per day is predicted to enter the pond. This is mercury that otherwise would have been deposited in the Illinois River or other water bodies by air deposition. Whatever low levels that are discharged from the ash pond represent a decrease in loading to the environment.

The facility submitted a document to substantiate theories concerning the behavior of the mercury removed from the air emissions through carbon addition and deposited in the ash pond. Activated Carbon Injection: Effect on Simulated Fly Ash Sluice Water, by the Electric Power Research Institute, March, 2007 is a report on measurements of mercury and other substances in fly ash sluice water containing added carbon. The report concludes that "mercury captured from the flue gas by the carbon is generally stable and does not leach out during simulated sluicing processes" (page 2-3). This document also cites a USEPA document

<sup>&</sup>lt;sup>55</sup> Petitioners' Memo, Fn. 8.

<sup>&</sup>lt;sup>56</sup> Proposed ELGs, 78 Fed. Reg. at 34457, 34463.

Characterization of Mercury-Enriched Coal Combustion Residues from Electric Utilities Using Enhanced Sorbents for Mercury Control, February 2006, EPA-600/r-06/008 that stated that mercury is "strongly retained by the coal combustion residues and unlikely to be leached at levels of environmental concern."<sup>57</sup>

As the above makes clear, IEPA did exactly what was posited by U.S. EPA guidance – it reviewed available information and concluded that effluent limits for the parameters at issue were not justified at this time, particularly because there was an absence of site-specific effluent data.<sup>58</sup> Moreover, the Agency drafted the Permit to impose monitoring requirements (quarterly for mercury and bi-annually for other metals) and to include a reopening clause.<sup>59</sup> As demonstrated by the Agency email cited by Petitioners, the Agency did so with the intent to closely watch the monitoring data results and possibly reopen the Permit prior to the end of its term to impose effluent limitations, if warranted. R. at 000692-93.

## C. IEPA Was Not Required to Rely upon Third-Party Effluent to Calculate a Reasonable Potential.

Petitioners argue that, prior to issuing the Permit, the Agency should have evaluated effluent data from another Illinois power plant, Newton, and/or power plants in other states to

<sup>&</sup>lt;sup>57</sup> R. at 000568.

<sup>&</sup>lt;sup>58</sup> Petitioners argue that because the Illinois River is listed on the State's 303(d) list for mercury, no discharges of mercury can occur unless the mercury concentration of discharge itself if below that of the waterbody. Petitioners' Memo, pp. 16 & 17. That argument fails to recognize that the 303(d) listing for mercury is wholly predicated on fish consumption, not ambient water quality. Illinois Integrated Water Quality Report and Section 303(d) List, at 42-44 (2014) (noting that determination regarding river impairment for fish consumption is made based on fish tissue samples demonstrating at least one fish species exceeds the 0.06 mg/kg criterion for mercury). DMG disagrees a 303(d) listing as impaired for fish consumption based on mercury in fish tissue means that the river is in violation of water quality standards. Phillips 66 Co. v. IEPA, Pet. Post-Hearing Br., PCB 12-101 at 17 (Nov. 15, 2012) (noting Bob Mosher of the Agency testified that there is no correlation between the determination that a river is impaired for fish consumption uses and whether the human health water quality standard is achieved); IEPA, Air Ouality Planning Section, Technical Support Document for Reducing Mercury Emissions from Coal-Fired electric Generating Units, at 70-73 (March 14, 2006) (noting that in study done of ambient mercury levels in water, lakes where ambient mercury levels were higher than the 12 parts per trillion water quality standard were not listed as impaired for fish consumption). Further, Petitioners have not alleged or established that the Illinois River segment to which Havana discharges is in violation of a mercury water quality standard - not even the most stringent human health mercury water quality standard of 0.012µg/L. 35 Ill. Adm. Code § 302.208. Ultimately, however, Petitioners' 303(d) list argument is irrelevant here because no applicable authority requires the Agency to conduct a reasonable potential analysis differently based on a 303(d) listing.

<sup>&</sup>lt;sup>59</sup> See R. at 000696-000716 (Permit Special Conditions 8, 21 and Standard Condition 8); R. at 000684, 000688.

calculate a reasonable potential for mercury.<sup>60</sup> No authority requires such an evaluation of thirdparty effluent data. As explained above at Point I.A, above, the *1991 U.S. EPA TSD* unambiguously posits that a permitting authority "can" (not must) "use a variety of factors and information where facility-specific effluent data are unavailable."<sup>61</sup> That is, the Agency need not rely on third-party data when determining whether to set effluent limits for a given a source and instead may choose to gather and rely on more representative monitoring data from the source being permitted.<sup>62</sup> While "type of industry" is a factor the *1991 U.S. EPA TSD* suggests can be considered by the Agency if it chooses to develop a permit limit without facility-specific monitoring data (which, as explained above, it need not), such a generalized assessment is not ideal. *Id.* at 50. Indeed, the *1991 U.S. EPA TSD* overtly recognizes that characterizations based on data from other industry sources are usually not representative due to source differences.

Based on experience, it is virtually impossible to generalize the toxicity of effluents with any certainty. If two plants produce the same type of product, one effluent may be toxic while the other may not be toxic due to the type and efficiency of the treatment applied, general materials handling practices, and the functional target of the compound(s) being produced.<sup>63</sup>

The differences between Newton (then owned by Ameren) and Havana are especially

stark. As was known to the Agency at the time of Permit issuance based on prior public submissions (*e.g.* NPDES applications, construction applications, and other submissions<sup>64</sup>), the

<sup>63</sup> Id.

<sup>&</sup>lt;sup>60</sup> Petitioners' Memo, p. 18.

<sup>&</sup>lt;sup>61</sup> 1991 U.S. EPA TSD at 50.

<sup>&</sup>lt;sup>62</sup> Id. at 51.

<sup>&</sup>lt;sup>64</sup> Although public records within the Agency demonstrate the differences between the two facilities, DMG recognizes that such information is not part of the Record and mentions the differences here only to respond to Petitioners' argument that it would somehow have been appropriate for Newton effluent data to have been used by the Agency to calculate a reasonable potential for Havana. If the Board does not wish to take notice of the fact that the two facilities have significant differences, DMG simply asserts that Petitioners failed to establish that it would have been reasonable or necessary for the Agency to have relied upon Newton data to calculate a reasonable potential for Havana's discharge.

ash pond systems of the two facilities are very different – they vary in number, area, depth, and hydraulic retention time. The differing ash pond systems receive varied types of contributing waste streams (including different amounts of spent ACI sorbent – an estimated 1.1 lbs/day at Newton and 0 - 0.6 lbs/day at Havana), utilize different water bodies as source water and discharge to different water bodies. With these and many other facility differences in mind, DMG submits that it would have been impossible for the Agency to have reasonably calculated a reasonable potential for Havana based on Newton effluent monitoring data.

## II. THE RECORD SUPPORTS THAT IEPA CONDUCTED A SUFFICIENT ANTIDEGRADATION ANALYSIS.

As discussed above, Petitioners bear the burden to establish the Permit somehow violates the Act or Board regulations. Therefore, to prevail on the antidegradation issue, Petitioners must demonstrate that IEPA's antidegradation assessment was insufficient and as a result, the discharge in question will not protect the existing uses of the Illinois River.<sup>65</sup> Petitioners' Memo fails to so demonstrate that the Havana Station's scrubber/ACI waste stream will adversely impact existing uses. Accordingly, the Board should reject Petitioners' antidegradation allegations and deny Petitioners' Motion. Based on substantial evidence of the Record demonstrating satisfaction of all antidegradation analysis requirements, the Board should grant summary judgment in favor of DMG finding that IEPA issued the Permit consistently with the Act and Board regulations.

Respondents satisfied all applicable antidegradation requirements. The Petition correctly notes DMG's NPDES renewal application contemplated the installation of a scrubber and an ACI injection system and that such would produce a new waste stream proposed for addition to

<sup>&</sup>lt;sup>65</sup> Village of Lake Barrington, et al v. IEPA and Village of Wauconda, PCB 05-55, 58, and 59 (consol.), slip op. at 11 (Apr. 21, 2005).

the Havana Station's East Ash Pond System (Outfall 005).<sup>66</sup> The combined waste stream (sometimes referred to as "SDA residue" in the Record and herein commonly referred to as the "scrubber/ACI waste stream") was estimated to be 25,000 tons per year. An estimated 2.6 tons of spent activated carbon per day (containing 0 to 0.6 lbs of mercury per day) was estimated to be within said 25,000 tons.<sup>67</sup> The Petition goes on to assert that IEPA failed to accomplish a sufficient antidegradation assessment under 35 III. Adm. Code § 302.105 with respect to wastes from the ACI system and SDA residue. Petition, p. 5. As will be explained below, that assertion is without merit. The Record provides substantial evidence that IEPA conducted a full and appropriate antidegradation assessment for the scrubber/ACI waste stream.

## A. IEPA Identified and Quantified All Proposed Loading Increases for Applicable Parameters and Impacts.

Petitioners' first antidegradation complaint concerns the required identification and quantification of proposed loading increases.<sup>68</sup> Contrary to Petitioners' claims, the Record supports the fact that the antidegradation assessment<sup>69</sup> conducted in connection with the IEPA's decision to issue the Permit complied with the requirements of 35 Ill. Adm. Code § 302.105(f)(1)(B) to identify and quantify the proposed load increases and expected impacts of the proposed new discharge. As explained above, the Record contemplated specific increased loadings of scrubber residue, including spent ACI carbon sorbent.<sup>70</sup>

With respect to spent ACI sorbent itself, the Record reflects the identification and quantification of an estimated increased loading of up to 2.6 tons of spent ACI sorbent per day

<sup>&</sup>lt;sup>66</sup> Petition, p. 4; R. at 000009.

<sup>&</sup>lt;sup>67</sup> R. at 000529.

<sup>68</sup> Petitioners' Memo, p. 22.

<sup>&</sup>lt;sup>69</sup> R. at 000544 (Sept. 10, 2010 memorandum from B. Mosher to M. Liska).

<sup>&</sup>lt;sup>70</sup> R. at 000529.

(containing 0 to 0.6 lbs of mercury per day) to the East Ash Pond System (Outfall 005).<sup>71</sup> IEPA considered the addition of mercury-containing sorbent from the new air emission control system as the most important change<sup>72</sup> and accordingly gave attention to mercury singly in addition to discussing each of the new waste streams.<sup>73</sup> The Record reflects that IEPA considered the findings of the *EPRI Study* and *2006 U.S. EPA Study* (*i.e.* that no leaching was expected with respect to ACI parameters of interest -- mercury, selenium and arsenic), in concluding that no detectable loading increase to the Illinois River was anticipated due to spent ACI sorbent.<sup>74</sup> That conclusion was consistent with expert testimony presented to the Board during the *Mercury Rule* rulemaking process. The evidence of public record in the *Mercury Rule* clearly supports the position that any mercury sequestered by the activated carbon would not leach in any observable concentrations.<sup>75</sup> For example:

To date, essentially every test that has addressed the potential for Hg-laden byproducts has shown the ultimate form of byproduct or solid effluent does not leach or re-emit the Hg in the environment. These results are perhaps the most significant of any testing and analysis conducted to date.<sup>76</sup>

Fly ash produced by ACI do contain increased amounts of mercury than those without ACI use. . . Leaching of the mercury from these fly ashes does not raise environmental concerns of any significance.<sup>77</sup>

EPA has and DOE, who sponsored many of these – DOE sponsored the test financially. They've done lots of testing on what – you know, leachability, does the mercury leach. And first of all, keep in mind there's already mercury in the

<sup>&</sup>lt;sup>71</sup> R. at 000545, 000568.

<sup>&</sup>lt;sup>72</sup> R. at 009679.

<sup>&</sup>lt;sup>73</sup> R. at 000680. (Based on their public comments and testimony, Petitioners clearly agreed that mercury was of greatest importance).

<sup>&</sup>lt;sup>74</sup> R. at 000550 ("[The ACI system] will bind mercury in with the sorbent so that the mercury will not leach into the discharged wastewater."), R. at 000545.

<sup>&</sup>lt;sup>75</sup> The Board is able to take administrative notice of public documents (35 Ill. Adm. Code 101.630) and is always able to consider its precedent. *Sutter Sanitation, Inc. et al. v. IEPA*, PCB 04-187 (Sept. 16, 2004).

<sup>&</sup>lt;sup>76</sup> Mercury Rule, R06-25, Jul. 28, 2006 Prefiled Testimony of J.E. Cichanowicz, p. 48.

<sup>&</sup>lt;sup>77</sup> Id., Aug. 17, 2006 (pm) Tr., Testimony of Mr. Murarka, p. 1050.

fly ash that's being disposed of. What you're doing is you're transferring more of the mercury into the fly ash that's being disposed instead of having to go up the smokestack. That's really what you're doing. Okay. So – And it doesn't leach now. The tests of the sorbent showed that it doesn't leach . . . In other words, these materials – they don't release mercury. They still have unutilized capacity, and they actually will clean up the mercury from the ash pond or clean up mercury from the air because that's what they are. They're mercury absorbants.<sup>78</sup>

The Record also establishes that DMG was to dispose of the spent ACI sorbent (indeed, all of the scrubber/ACI waste stream<sup>79</sup>) in dry areas of pond 1 of the East Ash Pond System (and later in pond 2, if/when pond 1 was filled).<sup>80</sup> Such would, obviously, effectively eliminate the degree of contact deposited scrubber/ACI waste would have with ash pond waters at all. Indeed, only precipitation falling directly to pond 1 (and, after pond 1 is full, pond 2) and contacting deposited scrubber/ACI waste could be expected to afford even a slight opportunity for any impact to East Ash Pond System waters.

In addition to the spent ACI sorbent, the Record reflects that IEPA considered all other aspects of the new scrubber/ACI waste stream<sup>81</sup> and similarly concluded that such <u>would not</u> result in a detectable increase in discharges to the Illinois River.<sup>82</sup> Many statements of the

<sup>&</sup>lt;sup>78</sup> *Mercury Rule*, R06-25, Jun. 22 and 23 Tr., Testimony of Dr. James E. Staudt, PhD, pp. 35-36, 40. This testimony, obviously known to IEPA at the time of Permit issuance, is especially interesting in that it suggests that spent ACI sorbent, when deposited in an ash pond, will continue to absorb metals of the ash pond wastewater.

<sup>&</sup>lt;sup>79</sup> DMG's antidegradation submission included sampling data of scrubber/ACI waste from its Baldwin facility because that waste stream did not yet exist at the Havana Station. R. at 000531. Although the pond systems and ultimate discharges of the two stations are significantly different, the similarity of the air pollution controls made Baldwin sampling data the most representative data available.

<sup>&</sup>lt;sup>80</sup> R. at 000654. As the IEPA knew prior to Permit issuance, the East Ash Pond System entails four ponds (1, 2, 3, and 4). At the time of the application and Permit issuance, these ponds were designed to operate in series with any wastewater from pond 1 flowing to pond 2, then to pond 3, then to pond 4, and ultimately to Outfall 005.

<sup>&</sup>lt;sup>81</sup> R. at 000544.

<sup>&</sup>lt;sup>82</sup> R. at 000680 ("[N]o detectable increase in Illinois River concentrations of any parameter is anticipated and no impact to the overall water quality or existing uses of the Illinois River will result from these changes."). DMG submits no more can be expected – neither DMG nor IEPA can be reasonably be expected to establish a parameter concentration below what can be detected.

Record affirm that conclusion.<sup>83</sup> And, as will be demonstrated further below, no substantial evidence of the Record conflicts with that conclusion.

[I]t is predicted that the increases in pollutant loading will not result in detectable increases in river concentrations of these parameters.<sup>84</sup>

The minute increases in concentration of all effluent constituents will not be detectable in water withdrawn downstream.<sup>85</sup>

Ash ponds are designed to retain and store suspended materials introduced from fly ash and other wastes. Thus the build-up of metals in the ash pond sediment is intentional and serves to keep metals and other undesirable materials out of the Illinois River.<sup>86</sup>

A fair and reasonable reading of each of these statements is that no detectable increased loading

to the Illinois River was expected to result from the proposed new discharge.

Petitioners' Memo attempts to cherry-pick statements from the Record in a misplaced effort to convey that IEPA concluded that the proposed scrubber/ACI waste stream would somehow result in an increased loading to the Illinois River. For example, Petitioners assert that IEPA concluded that "[w]hatever low levels that are discharged from the ash pond represent a decrease in loading to the environment" because "[t]his is mercury that would otherwise have been deposited in the Illinois River or other water bodies by air deposition."<sup>87</sup> That assertion takes the quotes out of context. The full text in question states as follows:

Mercury that has been removed from the air emissions is expected to stay in the sorbent in the settled ash in the pond. Between zero and 0.6 pounds of mercury per day is predicted to enter the pond. This is mercury that otherwise would have been deposited in the Illinois River or other water bodies by air deposition. Whatever low levels that are discharged from the ash pond represent a decrease in loading to the environment.

<sup>&</sup>lt;sup>83</sup> R. at 000678, 000679.

<sup>&</sup>lt;sup>84</sup> R. at 000678.

<sup>85</sup> R. at 000678.

<sup>86</sup> R. at 000679.

<sup>&</sup>lt;sup>87</sup> Petitioners' Memo, p. 17.

The first sentence of the quote demonstrates the IEPA's belief that there was not expected to be a detectable increased loading of mercury due to spent ACI sorbent. The final sentence is not inherently contradictory - "whatever low levels" could (and should) reasonably be read to mean that no detectable increase was expected. Petitioners have not, and cannot, demonstrate to the contrary.

Other statements of the Record identified by Petitioners as indicative of an increased loading to the Illinois River are actually similarly consistent with the overall finding of the Agency that no detectable increase to the Illinois River was expected.

The new loading that is actually discharged to the Illinois River will be minimal, consisting of mostly of dissolved salts with the rest settling in the ash pond.<sup>88</sup>

The metal-laden residue stays at the bottom of the lined ash pond and no significant amount of metals discharge to the Illinois River.<sup>89</sup>

The increases in loading of effluent constituents resulting from the permitted changes in the Dynegy discharges are minimal.<sup>90</sup>

Concentrations of metals in the discharged effluent are minimal and as such cannot cause build-ups in the river environment.<sup>91</sup>

"Minimal" and "no significant amount" are certainly consistent with IEPA's conclusion that: "Final effluent concentrations are not expected to increase measurably and will remain within applicable water quality standards for the Illinois River. Therefore, no detectable increase in Illinois River concentrations of any parameter is anticipated and no impact to the overall water quality or existing uses of the Illinois River will result from these changes."<sup>92</sup>

<sup>89</sup> Id.

<sup>&</sup>lt;sup>88</sup> R. at 000677.

<sup>90</sup> R. at 000678.

<sup>&</sup>lt;sup>91</sup> R. at 000679.

<sup>&</sup>lt;sup>92</sup> R. at 000680.

As the above makes clear, IEPA properly identified and qualified the proposed discharge based on substantial evidence and factual findings. DMG respectfully submits that substantial evidence of the Record clearly supports the proper loading identification and quantification of the scrubber/ACI waste stream.

## B. IEPA Satisfied All Four Criteria That Must Be Met Before a New or Increased Discharge May Be Permitted.

Petitioners' second antidegradation argument concerns satisfying the four criteria set forth in Section 302.105(c)(2)(B) of the Board's water quality standards.<sup>93</sup> That contention is wrong. Contrary to Petitioners' claims, IEPA's analysis satisfied all four antidegradation criteria. The applicable criteria are of 35 Ill. Adm. Code 302.105(c)(2)(B) are:

- i) The applicable numeric or narrative water quality standard will not be exceeded as a result of the proposed activity ("Criterion 1");
- ii) All existing uses will be fully protected ("Criterion 2");
- iii) All technically and economically reasonable measures to avoid or minimize the extent of the proposed increase in pollutant loading have been incorporated into the proposed activity; ("Criterion 3") and
- iv) The activity that results in an increased pollutant loading will benefit the community at large ("Criterion 4").<sup>94</sup>

Petitioners concede that IEPA's assessment satisfied Criterion 4 but believe Respondents' failed

to comply with the remaining three.<sup>95</sup> Each will be addressed below.<sup>96</sup>

#### 1. The Record Establishes That IEPA's Antidegradation Analysis Satisfied Criterion 1 and Criterion 2.

<sup>93 35</sup> Ill. Adm. Code 302.105(c)(2)(B). Petitioners' Memo, p. 21.

<sup>&</sup>lt;sup>94</sup> 35 Ill. Adm. Code 302.105(c)(2)(B).

<sup>&</sup>lt;sup>95</sup> Petitioners' Memo, p. 21.

<sup>&</sup>lt;sup>96</sup> It is, of course, true that IEPA may utilize the following information sources to address each of the four antidegradation criteria: (i) Information, data or reports available to the Agency from its own sources; (ii) Information, data or reports supplied by the applicant; (iii) Agency experience with factually similar permitting scenarios; and (iv) Any other valid information available to the Agency. 35 Ill. Adm. Code 302.105(c)(2)(C).

As demonstrated in Part II.A supra, substantial evidence in the Record supports IEPA's conclusion that the proposed discharge would not result an adverse impact on Illinois River water guality, non-compliance with applicable water guality standards, or non-attainment with any existing uses.<sup>97</sup> Indeed, although it may be impractical to expect every statement of every page of a 1000+ page record assembled over six years to appear perfectly consistent at first glance, DMG submits that no evidence in the Record (and certainly not any substantial evidence) demonstrates that either Criterion 1 or Criterion 2 were not satisfied. Indeed, Petitioners' criticisms concerning Criterion 1 and Criterion 2 are limited to inaccurate claims that: (a) IEPA repeatedly somehow admitted that there would be an increased loading to the Illinois River (addressed in Part II.A., supra), (b) a failure to expressly state that selenium and arsenic, like mercury, would not leach from spent ACI sorbent (as explained above, the findings of the EPRI Study and 2006 U.S. EPA Study apply equally to those metals; while IEPA may not have specifically named every parameter, by mentioning the two studies and its conclusion regarding mercury, IEPA inherently also advised the same with respect to selenium and arsenic), and (c) criticism of the EPRI Study and 2006 U.S. EPA Study (addressed at Parts I.B and II.A, supra). None of those claims can sustain Petitioners' burden of proof.

## 2. The Record Establishes That IEPA's Antidegradation Analysis Satisfied Criterion 3.

IEPA's analysis also satisfied Criterion 3. It explained, in part, that no economically reasonable alternatives other than treatment in the East ash pond existed due to the considerable useful life remaining in that pond system for ash storage.<sup>98</sup>

Treatment of the acid rinse water in the ash pond is the most practical and least polluting method available. Hauling this waste away for neutralization elsewhere

<sup>97</sup> R. at 000680.

<sup>98</sup> R. at 000546.

would be a waste of resources. Disposal of the mercury containing sorbent with the fly ash is necessary given that the mercury sorbent is mixed in with the other ash. Converting the power plant to a dry ash handling system is an alternative that was considered by the applicant. However, the existing lined East ash pond system has considerable useful life remaining as an ash storage facility. Dynegy estimates that several years of capacity remains to accept sluiced ash. Abandoning this considerable existing improvement is not a reasonable alternative. When the ash pond system becomes full, Dynegy will consider the alternatives for ash disposal at that future time and dry ash handling will be a topic of discussion. Therefore, no feasible alternatives exist for the changes proposed.<sup>99</sup>

DMG submits that this analysis was entirely reasonable and appropriate, particularly, given the conclusion that there would be no detectable increase in loading to the Illinois River. It simply was not necessary to exhaustively examine other alternatives that would, at best, accomplish the same result (no detectable increased loading to the Illinois River) at an inherently greater cost.

Contrary to Petitioners' assertions, the *Hanlon Memo* does not dictate a different analysis or conclusion under Criterion 3.<sup>100</sup> First, the *Hanlon Memo* does not purport to concern ACI wastes; it plainly concerns only FGD wastewater. That difference is significant. For example, the *Hanlon Memo's* discussion regarding the effectiveness of settling ponds was based on the inability to effectively remove dissolved metals (as opposed to particulate metals which can be expected to settle ("For metals present in both soluble and particulate forms (such as mercury), settling ponds will not effectively remove the dissolved fraction.").<sup>101</sup> Unlike FGD wastewater, spent ACI sorbent has been shown to retain the absorbed metals (*i.e.* the metals captured by the spent sorbent do not dissolve into waters of an ash pond).<sup>102</sup> Because the new waste stream

<sup>&</sup>lt;sup>99</sup> Id.

<sup>&</sup>lt;sup>100</sup> Petitioners' Memo, p. 31; *citing National Pollutant discharge Elimination System (NPDES) Permitting of Wastewater Discharges from Flue Gas Desulfurization (FGD) and Coal Combustion Residuals (CCR) Impoundments at Steam Electric Power Plants*, Memorandum from James A. Hanlon of EPA's Office of Water to EPA Water Division Directors, Regions 1-10, Jun. 7, 2010 (the "Hanlon Memo").

<sup>&</sup>lt;sup>101</sup> R. at 000902.

<sup>&</sup>lt;sup>102</sup> R. at 000545.

addressed by the Permit's antidegradation analysis did not concern FGD wastewater or dissolved metals, the *Hanlon Memo* is simply inapplicable. Second, were the *Hanlon Memo* somehow relevant to an evaluation of ACI waste (it is not), nowhere does the *Hanlon Memo* suggest that an antidegradation alternatives analysis involving no increased loading (or even a decrease) requires detailed consideration of non-settling alternatives.<sup>103</sup>

## C. Illinois Does Not Require the Same Extensive Antidegradation Assessment in All Instances

In promulgating its antidegradation regulations, the Board rejected industry's proposal to adopt a *de minimis* exemption allowed by federal rules that would exempt "minimal" increases in pollutant loading from antidegradation review.<sup>104</sup> Instead, the Board required that any increase in pollutant loading would trigger antidegradation review. In doing so, the Board recognized, however, "that all proposed increases in pollutant loadings should not require the same level of review to demonstrate compliance with the proposed antidegradation standard."<sup>105</sup>

During the rulemaking process, IEPA explained at hearing that even though an antidegradation review would be required for any increase in pollutant loading, the degree of review would vary depending on the circumstances. IEPA repeatedly testified that in certain cases, activities might only get a much abbreviated antidegradation analysis.<sup>106</sup> IEPA also testified that "[w]e have a sliding scale here that intends to target our resources and your resources where the significance of the decision was more apparent and back off in those cases

<sup>&</sup>lt;sup>103</sup> Petitioners also cite the 2009 U.S. EPA Report as support for the conclusion that IEPA's alternatives analysis was insufficient. Petitioners' Memo, p. 31; *citing 2009 U.S. EPA Report*, Ch. 4. DMG fails to see where this document discusses treatment technologies other than ash ponds for ACI waste streams. Again, this document addresses only FGD systems.

<sup>&</sup>lt;sup>104</sup> In the Matter of: Revisions to Antidegradation Rules, 35 Ill. Adm. Code 302.105, 303.205, 303.206, and 102.800-830, R01-13, slip op. at 15 (Jun. 21, 2001) ("Antidegradation Rules").

<sup>&</sup>lt;sup>105</sup> Antidegradation Rules, R01-13, slip op. at 13 (Jun. 21, 2001) (first notice opinion and order).

<sup>&</sup>lt;sup>106</sup> Antidegradation Rules, R01-13, Testimony of T. Frevert, Nov. 17, 2000 Tr. pp. 61-2, 73, 79-80, 99, 110-11, 127-28.

where we know the relative significance still warrants some review, but it warrants a lesser review.<sup>107</sup> For example, if an applicant is proposing any increase in loading of a particular parameter in a water body impaired for that parameter, but the net in-stream concentration would still remain at or below the water quality standard, the increase would trigger antidegradation review.<sup>108</sup> IEPA would have to document in the permit fact sheet the rationale for allowing the increment increase in loading to be discharged, but the applicant would get its permit and "probably wouldn't have to do anything."<sup>109</sup> While such a review may seem cursory, IEPA views it as an acceptable form of antidegradation review.<sup>110</sup> Further illustrating this point, if IEPA were to determine that the actual in-stream concentration would be better than worse, it would not ask the applicant for any information beyond that even if there is an increase in loading.<sup>111</sup>

Petitioners Prairie Rivers Network and Sierra Club acknowledged IEPA's approach during the rulemaking process and admitted they were "willing to try for now the 'case by case' approach being proposed by the Agency, recognizing that the other side of having some antidegradation analysis given to all degradation is that there is only a very low minimum level of analysis that is always required."<sup>112</sup> Petitioners expressly acknowledged and acquiesced to this approach during the antidegradation rulemaking process and cannot now credibly claim (as

<sup>&</sup>lt;sup>107</sup> Antidegradation Rules, R01-13, Testimony of T. Frevert, Nov. 17, 2000 Tr. pp. 73-74.

<sup>&</sup>lt;sup>108</sup> Antidegradation Rules, R01-13, Nov. 17, 2000 Tr. pp. 126-129.

<sup>&</sup>lt;sup>109</sup> *Id.* at 128.

<sup>&</sup>lt;sup>110</sup> Id. at 133.

<sup>&</sup>lt;sup>111</sup> Antidegradation Rules, R01-13, Nov., 17, 2000, Tr. pp. 132-133.

<sup>&</sup>lt;sup>112</sup> Antidegradation Rules, R01-13, Memorandum of Law and Supplemental Testimony of the Environmental Law & Policy Center, Friends of the Fox River, Prairie Rivers Network, and Sierra Club, p. 17 (dated Jan. 18, 2001).

they have at page 20 of Petitioners' Memo) that a full analysis is always required under the applicable regulations.<sup>113</sup>

The circumstances of the proposed new scrubber/ACI waste stream certainly warranted the less rigorous antidegradation assessment previously contemplated by the Board during the aforementioned antidegradation rulemaking. As discussed above, IEPA had substantial evidence that the proposed new waste stream, placed in dry areas of the East Ash Pond System most remote from Outfall 005, would result in no detectable parameter increase in the Illinois River; indeed, the actual in-stream concentration of mercury was expected to decrease in the Illinois River and other water bodies. In the Permit fact sheet, IEPA states:

Between zero and 0.6 pounds of mercury per day is predicted to enter the ash pond. This is mercury that otherwise would have been deposited into the Illinois River or other water bodies by air deposition. Whatever low levels that are discharged from the ash pond represent a decrease in loading to the environment.<sup>114</sup>

Moreover, it was well-established that the installation of pollution control equipment at Illinois coal-fired electric generating plants would result in an overall decrease in mercury loading to the Illinois River and other water bodies.<sup>115</sup> This was a critical and well-established fact relied on by the Board in adopting the Illinois *Mercury Rule*. The *Mercury Rule* established that: (1) the regulations the Board adopted in that proceeding would reduce the amount of mercury that would enter Illinois water bodies via air deposition; and (2) pollution control technologies such as ACI were available that would capture mercury and stay absorbed to mercury even after

<sup>&</sup>lt;sup>113</sup> "IEPA appears to be taking the position that it is allowed to perform quick and dirty analysis of discharges it does not subjectively view as significant, rather than the full analysis required under applicable regulations. Nothing in the law supports that approach." Petitioners' Memo, p, 20.

<sup>&</sup>lt;sup>114</sup> R. at 000568, 000602, 000819, 000849.

<sup>&</sup>lt;sup>115</sup> Mercury Rule, R06-25 (Dec. 21, 2006).

disposal.<sup>116</sup> In the *Mercury Rule*, the Board found that "lowering emissions of mercury in Illinois will impact [lower] the amount of mercury deposited in Illinois waters."<sup>117</sup> The Board quoted IEPA as stating "nearly 50% of mercury entering many bodies of water comes from air deposition."<sup>118</sup> Expert testimony during the rulemaking (*See* Part II.A, *supra*) demonstrated that absorbed parameters were not expected to leach from spent ACI sorbent. The evidence of record in the *Mercury Rule* clearly supports IEPA's conclusion that any mercury sequestered by the activated carbon combined with wet sluiced fly ash will not leach in any observable concentrations and the installation of ACI technology will result in an overall benefit to the environment.<sup>119</sup>

Petitioners appear to suggest that the extensive alternatives analysis contemplated by U.S.

EPA's Region 8 antidegradation guidance was required with respect to the Permit.<sup>120</sup> Its discussion of that position neglects to reflect that, like the Region 5 antidegradation guidance, the Region 8 guidance generally allows for the elimination from a full antidegradation review of activities that do not present significant threats to water quality.<sup>121</sup> In other words, federal

<sup>&</sup>lt;sup>116</sup> Id.

<sup>&</sup>lt;sup>117</sup> Mercury Rule, R06-25, slip op. at 3 (Nov. 2, 2006).

<sup>&</sup>lt;sup>118</sup> Id. at 7.

<sup>&</sup>lt;sup>119</sup> Federal guidance supports the conclusion that cross-media effects may be an essential component of some antidegradation determinations. *Region V Guidance for Antidegradation Policy Implementation for High Quality Waters – December 3, 1986*, U.S. EPA, pp. 12-13. Federal guidance also states that non-point source reductions, such as air deposition, for example, must be considered in the waste load allocation analysis and in determining whether to perform an antidegradation analysis. *Water Quality Standards Handbook*, U.S. EPA 2012, Chapter 4 Antidegradation, Ch. 4.8.1.

<sup>&</sup>lt;sup>120</sup> Petitioners' Memo, p. 27; *citing EPA Region VIII Guidance: Antidegradation Implementation*, Part VI, p. 16 (1993).

<sup>&</sup>lt;sup>121</sup> EPA Region VIII Guidance: Antidegradation Implementation, Part V1, p. 16 (1993) ("[t]he Division will identify and eliminate from further review only those proposed activities that present insignificant threats to water quality"); *Water Quality Standards Handbook, 2<sup>nd</sup> Ed.*, Chapter 4: Antidegradation (40 CFR 131.12), EPA-823-B-12-0002 (2012), Ch. 4.5; *referencing Tier 2 Antidegradation Reviews and Significance Thresholds*, Memorandum from E. King, Director of Office of Science and Technology to Water Management Division Directors, Regions 1-10, Aug. 8, 2005; *Interim Economic Guidance for Water Quality Standards: Workbook*, EPA-823-B-95-002, Section 1, 1.1 (1995).

guidance that requires a "broad and thorough" evaluation of treatment technology alternatives assumes that some proposed activities causing insignificant impacts do not warrant that level of review. The Board rejected adopting the "significance determination" approach but nonetheless acknowledged that some minimal proposed increases in pollutant loadings would not require the same extensive antidegradation review.<sup>122</sup> Therefore, while the Region 8 guidance requires an extensive economic analysis, it does not actually suggest that level of review for dischargers deemed by the permitting authority to be insignificant (like that at issue for the Havana Station).

## D. DMG's Proposed Discharges Are Distinguishable from Discharges Requiring a More Rigorous Antidegradation Review.

The only precedent case cited in Petitioners' antidegradation argument<sup>123</sup> is factually distinguishable. Importantly, among other differences, the record in that case established an increased loading of a pollutant (phosphorus), an actual or likely reasonable potential for another pollutant based on existing facility-specific effluent monitoring data, and the Agency's reliance on an environmental report which it itself highly criticized.<sup>124</sup> None of these circumstances is present in this matter. For example, unlike the technical study at issue in *New Lenox*, the *EPRI Study* and *2006 U.S. EPA Study* are not contradicted by the IEPA and are substantively supported by the aforementioned substantial expert testimony of the *Mercury Rule*. Moreover, effluent monitoring data from the Havana Station were not available for the proposed discharge because the waste streams in question were entirely new<sup>125</sup> while the *New Lenox* analysis included facility-specific monitoring data.

<sup>&</sup>lt;sup>122</sup> Antidegradation Rules, R01-13, p. 13 (Jun. 21, 2001).

<sup>&</sup>lt;sup>123</sup> Des Plaines River Watershed Alliance v. IEPA ("New Lenox"), PCB 04-88 (Apr. 19, 2007), aff'd sub nom. IEPA v. IPCB, 896 N.E.2d 479 (III. App. 3d. 2008).

<sup>&</sup>lt;sup>124</sup> New Lenox, 896 N.E.2d at 488-49.

<sup>&</sup>lt;sup>125</sup> R. at 000544.

This permit decision is also distinguishable from a recent Board NPDES permit appeal affirming IEPA's decision to impose a mercury effluent limit.<sup>126</sup> *Phillips 66* involved an appeal of several conditions attached to an IEPA-issued NPDES permit, one of which was a mercury water quality based effluent limit. In *Phillips 66*, the company provided data (14 samples) to IEPA showing that the effluent concentration averaged above the mercury human health water quality standard.<sup>127</sup> Moreover, it was confirmed in *Phillips 66* that 0.11 lbs per day of mercury would be added to the receiving water body.<sup>128</sup> In contrast, there was no confirmed increased discharge of mercury from the Havana Station to the Illinois River at the time of permit issuance and no data representative of the proposed discharge available to IEPA as of the date of the permit issuance. The mercury effluent limit in *Phillips 66* was included under very different circumstances.

#### III. IEPA WAS NOT REQUIRED TO IMPOSE BAT-BASED TBELS BASED ON BPJ.

Contrary to Petitioners' assertions, IEPA was not required to set best available technology economically achievable ("BAT") technology-based effluent limits ("TBELs) using its best professional judgment ("BPJ") for the Havana Station scrubber/ACI waste stream. Rather, it was within IEPA's discretion to determine whether and how to apply BPJ and whether to establish TBELs for said waste stream. As detailed below, IEPA is not required to establish a BPJ-based TBEL when a point-source category is governed by national effluent limitation guidelines ("ELGs") established by U.S. EPA. Here, the Havana Station was governed by the *Steam Electric Power Generating Point Source Category; Effluent Limitations Guidelines, Pretreatment Standards and New Source Performance Standards*, 47 Fed. Reg. 52290 (Nov. 19,

<sup>&</sup>lt;sup>126</sup> *Phillips 66 Company v. IEPA*, PCB 12-101 (Mar. 21, 2012) (on appeal with the Illinois Appellate Court for the Fifth District).

<sup>&</sup>lt;sup>127</sup> Id. at 3-4.

<sup>&</sup>lt;sup>128</sup> Id. at 4.

1982); 40 C.F.R. Part 423 (the "1982 ELGs") and, accordingly, IEPA was under no obligation to establish BAT-based TBELs using BPJ for the scrubber/ACI waste stream.

The Petitioners claim the 1982 ELGs for the steam electric generating industry "did not address wastewater from pollution control equipment such as scrubbers and ACIs,"<sup>129</sup> but they are mistaken. The Havana Station scrubber/ACI waste stream is regulated under the 1982 ELG for steam electric generating plants, which expressly excludes mercury and other toxic pollutants from national regulation. Therefore, it was entirely within IEPA's discretion whether to impose any additional BAT-based TBELs concerning the Havana Station scrubber/ACI waste stream using BPJ. Moreover, it was reasonable and consistent with U.S. EPA direction for IEPA to have used its discretion to refrain from establishing BPJ-based BAT effluent limitations and instead impose monitoring requirements. Consequently, the Board should reject Petitioners' allegation that IEPA was required to impose case-by-case BPJ-based BAT effluent limits in the Permit and grant summary judgment in favor of DMG finding that IEPA issued the Permit consistently with the Act and Board regulations.

#### A. Because Existing ELGs Apply to the Havana Station Discharges, IEPA Did Not Have to Set TBELs.

#### 1. Background Regarding BAT-based TBELs.

NPDES permits may contain both TBELs and water quality based effluent limits.<sup>130</sup> The TBELs at issue in this matter concern BAT. 33 U.S.C. § 1311(b)(2)(A). BAT-based TBELs are generally developed on an industry-wide basis and set a minimum level of treatment that is technologically available and economically achievable for facilities within a specific industry. *In re Keene Wastewater Treatment Plant*, 2008 WL 782613 (EPA 2008). U.S. EPA established

<sup>&</sup>lt;sup>129</sup> Petitioners' Memo, p. 36.

<sup>&</sup>lt;sup>130</sup> Catskill Chapter, Trout Unlimited v. City of New York, 451 F.3d 77, 85 (2d Cir. 2006).

BAT for the steam powered electric industry via the 1982 ELG. The law is clear that, when an ELG has been promulgated for an industry, the effluent limitations of that ELG must be included in NPDES permits issued to facilities within that industry. 33 U.S.C. § 1311(e) ("Effluent limitations established pursuant to this section or section 1312 of this title shall be applied to all point sources of discharge of pollutants in accordance with the provisions of this chapter."); 33 U.S.C. § 1342 (directing the Administrator to incorporate established effluent limitation regulations into NPDES permits issued to individual dischargers).

The law is also clear that, when an ELG has not yet been promulgated for a particular industry, permitting authorities are to use their BPJ to establish effluent limits.

In situations where the EPA has not yet promulgated any ELGs for the point source category or subcategory, NPDES permits must incorporate 'such conditions as the Administrator determines are necessary to carry out the provisions of the Act.' 33 U.S.C. 1342(a)(1). . . In practice, this means that the EPA must determine on a case-by-case basis what effluent limitations represent the BAT level, using its 'best professional judgment.'<sup>131</sup>

There is, however, a third possible way in which a permitting authority may establish BAT. "Technology-based treatment requirements <u>may</u> be imposed . . . . Where promulgated effluent limitations guidelines apply only to certain aspects of the discharger's operation, or to certain pollutants, other aspects or activities are subject to regulation on a case-by-case basis in order to carry out the provisions of the Act."<sup>132</sup> In other words, existing ELGs could, at a permitting authority's discretion, be supplemented with a BPJ-based effluent limitation with respect to pollutants or activities outside of the ELGs. U.S. EPA's *NPDES Permit Writers' Manual* has long cautioned permitting authorities to not supplement the ELG for a particular

<sup>&</sup>lt;sup>131</sup> Texas Oil & Gas Ass'n v. EPA, 161 F.3d 923, 928 (5th Cir. 1998); Tribe v. Montana Dep't of Envtl. Quality, 234 P.3d 51, 55 (Mont. 2010); 33 U.S.C. 1342(a)(1)(B) ("prior to the taking of necessary implementing actions," "the Administrator may . . . issue a permit for the discharge of any pollutant . . . upon condition that the discharge will meet such conditions as the Administrator determines are necessary to carry out the provisions of this chapter").

<sup>&</sup>lt;sup>132</sup> 40 C.F.R. § 125.3(c)(3).

pollutant if U.S. EPA considered that pollutant in promulgating the ELGs and intentionally refrained from setting an effluent limit for that pollutant.

[P]rior to establishing BPJ-based limits for a pollutant not regulated in an effluent guideline, the permit writer should ensure that the pollutant was not considered by EPA when developing the ELGs (i.e., BPJ-based effluent limits are not required for pollutants that were considered by EPA for regulation under the effluent guidelines, but for which EPA determined that no ELG is necessary).<sup>133</sup>

U.S. EPA affirmed that position when it updated the NPDES Permit Writers' Manual in 2010:

"The permit writer should make sure that the pollutant of concern is not already controlled by the

effluent guidelines and was not considered by EPA when the Agency developed the effluent

guidelines."<sup>134</sup> The discretionary nature of BPJ in the presence of an ELG that does not control a

given pollutant is further evidenced by U.S. EPA's directive in the 1982 ELGs preamble:

One issue that warrants consideration is the effect of this regulation on the powers of NPDES permit-issuing authorities. The promulgation of this regulation does not restrict the power of any permitting authority to act in any manner consistent with law or these or any other EPA regulations, guidelines, or policy. For example, even if this regulation does not control a particular pollutant, the permit issuer <u>may</u> still limit such pollutant on a case-by-case basis when limitations are necessary to carry out the purposes of the Act.<sup>135</sup>

In sum, while case-by-case BPJ-based limits are required where U.S. EPA has not yet

issued ELGs for a source category, permitting authorities may use BPJ to set permit limits "on a

case-by-case basis . . . [w]here promulgated effluent limitations guidelines only apply to . . .

certain pollutants."<sup>136</sup> This use of BPJ is discretionary and not mandatory in such circumstances.

This point was recently affirmed by a Tennessee authority.<sup>137</sup>

<sup>&</sup>lt;sup>133</sup> NPDES Permit Writers' Manual (1996) at 69-70 (1996).

<sup>&</sup>lt;sup>134</sup> NPDES Permit Writers' Manual (2010) at Ch. 5, p. 5-45 to -46 (2010).

<sup>&</sup>lt;sup>135</sup> 47 Fed. Reg. 52290, 52302 (Nov. 19, 1982) (emphasis added).

<sup>&</sup>lt;sup>136</sup> 40 C.F.R. § 125.3(c)(3).

<sup>&</sup>lt;sup>137</sup> See, In the Matter of: Tennessee Clean Water Network, et al v. TDEC and Tennessee Valley Authority, Case No. WPC10-0116 (Dec. 2013) (holding that it was within the discretion of state permitting agency whether to conduct BPJ for scrubber technology at coal-fired power plant because the plant was governed by the 1982 ELG) (Attached

## 2. The 1982 ELG Applies to the Havana Station Scrubber/ACI Waste Stream.

The 1982 ELGs apply to Havana Station's scrubber/ACI waste stream as low volume waste sources. The term "low volume waste sources means, taken collectively as if from one source, wastewater from all sources except those for which specific limitations are otherwise been established in this part."<sup>138</sup> "Low volume wastes sources include, but are not limited to: wastewaters from wet scrubber air pollution control systems . . . ."<sup>139</sup> The Proposed ELGs affirm that U.S. EPA considers ACI waste to be a low volume waste source. In that proposal, U.S. EPA defines flue gas mercury control ("FGMC") wastewater as wastewater that originates from activated carbon injection systems.<sup>140</sup> U.S. EPA further states, "FGMC wastewater is currently <u>included</u> under the definition of low volume wastes, with effluent limits for TSS and oil and grease based on surface impoundments designed to remove suspended solids."<sup>141</sup> Waste from the Havana Station's scrubber (which includes ACI waste) is also plainly a low volume waste source both because the aforementioned definition expressly includes scrubbers and because its specific effluent limitations are not elsewhere set for dry scrubber waste in the 1982 ELG.

The 1982 ELGs addressed a variety of pollutants associated with the "low volume waste sources." It prohibits all discharges of PCBs and places limits on discharges of oil and grease and total suspended solids, as well as prescribes the acceptable pH range of discharges for these wastes.<sup>142</sup> Importantly, in developing 1982 ELGs, U.S. EPA also specifically considered, but

<sup>139</sup> Id.

as Attachment 1). Like the Kentucky case attached to Petitioners' Memo, DMG understands the attached Tennessee decision to be pending appeal.

<sup>&</sup>lt;sup>138</sup> 40 C.F.R. § 423.11(b).

<sup>&</sup>lt;sup>140</sup> Proposed ELGs, 78 Fed. Reg. at 34454.

<sup>&</sup>lt;sup>141</sup> Id. at 34463 (emphasis added).

<sup>&</sup>lt;sup>142</sup> 40 C.F.R. § 423.12.

expressly excluded, effluent limitations for certain toxic pollutants, including mercury, selenium and arsenic, in low volume waste sources because they were "present in amounts too small to be effectively reduced by technologies known to the Administrator."<sup>143</sup> In other words, it wasn't necessary to establish effluent limitations for mercury, selenium and arsenic because such were present in concentrations too low to be effectively reduced by then known technologies.

Because the 1982 ELGs apply to the Havana Station scrubber/ACI waste stream as a low volume waste source and because U.S. EPA expressly considered, but intentionally omitted, technology-based effluent limitations for mercury, selenium, and arsenic in low volume waste sources in developing the 1982 ELGs, IEPA had the discretion, but not a duty, to impose case-by-case BPJ-based effluent limits.

Sound policy supports limiting the circumstance in which a state permitting agency must undertake the onerous and resource-intensive process to determine a case-by-case BPJ-based BAT. A BPJ analysis inherently requires the state permit writer to assess "[t]he appropriate technology for the category or class of point sources of which the applicant is a member."<sup>144</sup> In other words, to determine a case-by-case BPJ-based BAT effluent limitation, a state permit writer must complete an extensive nation-wide data collection regarding industry facilities, equipment, pollutants, control technologies, and economics. The difficult nature of such an undertaking is evidenced by the data collection efforts and subsequent technology and economic analysis U.S. EPA has conducted of data in its work to update the 1982 ELGs. Petitioners have argued that, the "survey on which [the Proposed] ELG conclusions were drawn were based conducted in 2010 concerning calendar year 2009."<sup>145</sup> The referenced Proposed ELGs text is

<sup>&</sup>lt;sup>143</sup> 47 Fed. Reg. 52303 (Nov. 19, 1982).

<sup>144 40</sup> C.F.R. § 125.3(c)(2)(i).

<sup>&</sup>lt;sup>145</sup> Petitioners' Memo, Fn.19.

made in U.S. EPA's discussion of a pending CCR rulemaking.<sup>146</sup> In no way does it suggest that the technology and economic information IEPA would have needed to conduct a BPJ analysis was available to IEPA in 2010.

## 3. The 1982 ELGs for Power Plants Applies to the Havana Station's Waste Streams.

As explained above, where there are applicable industry-wide ELGs that do not regulate the pollutants at issue, federal regulations provide permit writers discretion in setting "supplemental" BPJ limits. Federal regulations provide that TBELs <u>may</u> (not must) be imposed on a case-by-case basis if the applicable ELGs only cover certain pollutants.<sup>147</sup> When a permitting agency does conduct a case-by-case BPJ determination, U.S. EPA has suggested that permit writers should prescribe BPJ limits for toxic pollutants discharged at <u>significant</u> levels:

The case-by-case approach, authorized by section 402(a)(1), allows permit writers to assure that all *significant pollutant parameters* are limited, so that EPA may focus its guidelines development on the most severe toxic pollutant discharges... Upon obtaining all necessary information, including file data and other sources of data on discharges for the facility, *the permit writer will determine whether any pollutant not regulated by an applicable guideline is being discharged in a significant amount, requiring the development of specific permit limits ... for the pollutant. The permit writer will thus have developed an informal list of pollutants for which additional control is required. These will include the section 307(a) toxic pollutants which have been reported in the application to be present at <i>significant levels*.<sup>148</sup>

<sup>&</sup>lt;sup>146</sup> "However, it is also possible that the requirements established under a final ELG rule could affect the development of any final CCR rule more broadly. Since the close of the comment period on the CCR rule, EPA has received significant new data obtained from a 2010 Information Collection Request (ICR) conducted by EPA's Office of Water for the development of the ELG, which have the potential to affect the risk assessment for the CCR rule. This ICR gathered information from, among others, all 495 electric utility plants that operate coal-fired generating units. In the June 21, 2010 proposal, EPA did not have definitive data about the location, size, or age of the waste management units, nor on the type or composition of the wastes contained in surface impoundments. Consequently, the Agency relied on a 1995 industry report and a number of significant assumptions in the 2010 risk assessment supporting the proposed CCR rule." Proposed ELGs, 78 Fed. Reg. at 34442 (emphasis added).

<sup>&</sup>lt;sup>147</sup> 40 C.F.R. § 125.3(c)(3).

<sup>&</sup>lt;sup>148</sup> 44 Fed. Reg. 34393, 34396, and 34397 (Jun. 14, 1979) (emphasis added).

The suggestion that permit limits be set only for "significant" levels of toxic pollutants originates from a court-approved settlement agreement under which U.S. EPA, in promulgating ELGs (including for the Steam Electric Generating Point Source Category), is not required to include limits for a "specific pollutant" if "the pollutant is present only in trace amounts and is neither causing nor likely to cause toxic effects."<sup>149</sup> As detailed at Part II.A, *supra*, IEPA did not identify any significant discharge to the Illinois River from this waste stream.

#### 4. Relevant Authority Supports a Finding That the 1982 ELGs Applied to the Havana Station Scrubber and ACI Waste Stream and Imposing Additional Case-by-Case BPJ Limits Was Not Required.

As previously referenced, the Tennessee Department of Environment and Conservation, Board of Oil, Water Quality and Gas ("TN Board") recently affirmed that the 1982 ELGs apply to scrubber waste streams and that BPJ analyses by permitting authorities are discretionary.<sup>150</sup> The TN Board recognized the language of the 2010 version of the *NPDES Permit Writers' Manual*, remained silent regarding the *Hanlon Memo* (but implicitly rejected it), and found that the 1982 ELGs applied to the low volume waste source waste stream at issue.<sup>151</sup> As a result, the TN Board determined "a Best Professional Judgment (BPJ) analysis was not required."<sup>152</sup> Rather, it concluded that permit writers have discretion to determine whether and when to set additional limits for pollutants not covered by an industry-wide ELG and that it was legally

<sup>&</sup>lt;sup>149</sup> *NRDC v. Train*, 8 ERC 2120, 2126 (D.D.C. 1976) (original settlement agreement); *NRDC v. Costle*, 12 ERC 1833, 1842 (D.D.C. 1979) (modified settlement agreement). Federal guidance indicates that TBELs are established using BPJ only when "the pollutant is present, or expected to be present, in the discharge in amounts that can be treated or otherwise removed . . . ." *NPDES Permit Writers' Manual (2010)* at Ch. 5, p. 5-46.

<sup>&</sup>lt;sup>150</sup> In the Matter of: Tennessee Clean Water Network, et al v. TDEC and Tennessee Valley Authority, Case No. WPC10-0116 (Dec. 2013).

<sup>&</sup>lt;sup>151</sup> Id. at 5.

<sup>&</sup>lt;sup>152</sup> Id.

impossible for the agency to have violated the law by voluntarily conducting a discretionary analysis.<sup>153</sup>

This reasoning supports the purpose of national industry-wide ELGs which is to establish a level playing field among competitors in the industry. Similar to the permit at issue in the TN Board decision, valid federal guidance and federal regulations demonstrate that the 1982 ELGs applied to the Havana Station waste stream at issue and IEPA had the discretion whether to set additional case-by-case BPJ-based effluent limitations.

Rather than the authorities referenced above, Petitioners rely on the *Hanlon Memo* and a Kentucky case to support their argument that IEPA should have imposed a BAT-based TBEL using BPJ.<sup>154</sup> Neither is relevant to the facts at hand. The *Hanlon Memo* is irrelevant for two reasons.

First, by stating that where an ELG does not address all pollutants discharged by an industrial discharger, U.S. EPA <u>must</u> establish TBELs on a case-by-case basis based on BPJ, the *Hanlon Memo* contradicts decades of authority and U.S. EPA policy.<sup>155</sup> Nothing in the CWA or Act requires IEPA to supplement existing ELGs for components of a discharge for which the ELGs provide no effluent limitations. In promulgating the 1982 ELGs, U.S. EPA stated "even if this regulation does not control a particular pollutant, the permit issuer <u>may</u> still limit such pollutant on a case-by-case basis when limitations are necessary to carry out the purposes of the Act.<sup>156</sup> Indeed, prior to the *Hanlon Memo*, U.S. EPA had consistently stated since 1982 that

<sup>&</sup>lt;sup>153</sup> Id.

<sup>&</sup>lt;sup>154</sup> See Ky. Waterways Alliance v. Energy and Envtl. Cabinet, No. 11-Cl-1613, p. 12 (Franklin Cnty. Cir. Ct. Sept. 10, 2013).

<sup>&</sup>lt;sup>155</sup> Hanlon Memo, Attach. A, p. 1-2.

<sup>&</sup>lt;sup>156</sup> 47 Fed. Reg. 52290, 52302 (Nov. 19, 1982) (emphasis added).

permit writers "may," not "must," supplement the ELGs with BPJ limits.<sup>157</sup> With this mind, DMG suggests that the *Hanlon Memo* is simply incorrect in asserting that BPJ limits are <u>required</u> for metals where the industry-wide ELG for power plants does not apply.

Second, the *Hanlon Memo* makes conclusions based on assumptions about FGD wastewater that are not true for ACI wastewater at Havana Station. For example, the *Hanlon Memo* states, "FGD wastewaters generally contain significant levels of pollutants, including bioaccumulative pollutants such as arsenic, mercury, and selenium."<sup>158</sup> In the Havana Station ACI wastewater, the same metals that are present in FGD wastewater may be present, but in solid particulate form (absorbed to carbon), not in dissolved form. The *Hanlon Memo* bases its conclusion regarding wastewater treatment technologies on the assumption that ash ponds do not reliably and effectively remove the dissolved fraction, whereas IEPA acknowledged that treatment by ACI would not produce a dissolved fraction of metals<sup>159</sup> (*i.e.* would not leach).<sup>160</sup> Moreover, the Record established that scrubber/ACI waste stream was to be deposited in dry ash pond areas.<sup>161</sup> In addition, IEPA found there would be no increased loading of pollutants to the Illinois River due to the proposed activity.<sup>162</sup> Therefore, the *Hanlon Memo* was irrelevant as to the requirement to establish BPJ limits for the Permit. It inconsistent with federal law and guidance and altogether inapplicable to the Havana Station discharge.

<sup>&</sup>lt;sup>157</sup> 75 Fed. Reg. 5788, 5790 (Feb. 4, 2010); 73 Fed. Reg. 78786, 78788 (Dec. 23, 2008); 60 Fed. Reg. 21592, 21629 (May 2, 1995).

<sup>&</sup>lt;sup>158</sup> Id., Attach. A, p. 2.

<sup>&</sup>lt;sup>159</sup> Indeed, prior testimony before the Board suggested that spent ACI sorbent deposited into ash pond wastewater could be expected to improve the water quality of those waters by absorbing additional parameters already in the pond wastewater. *Mercury Rule*, R06-25, Testimony of S. Nelson, Jun. 22 and 23 Tr. pp. 39-40.

<sup>&</sup>lt;sup>160</sup> See e.g. R. at 000755 (referencing the EPRI Study).

<sup>&</sup>lt;sup>161</sup> R. at 000654.

<sup>&</sup>lt;sup>162</sup> See e.g. R. at 000733.

The *Kentucky Waterways* 2013 decision is distinguishable for two reasons. First, the *Kentucky Waterways* decision is premised upon the *Hanlon Memo*, which, as explained above is not relevant. Moreover, the court's decision is based on a determination that mercury, selenium and arsenic were "not considered" by the 1982 ELG notwithstanding the fact that such were expressly considered (analytical data was collected and reviewed) by U.S. EPA and subsequently intentionally excluded from national regulation. "The following 24 toxic pollutants are excluded from national regulation because they were present amounts too small to be effectively reduced by technologies known to the Administrator: . . . Arsenic . . . Mercury . . . Selenium . . . . <sup>n163</sup> DMG respectfully submits that such determination is in error and contrary to the plain reading of the above federal register text. As noted earlier, the decision is pending an appeal.

#### B. Consistent with Applicable Law, IEPA Did Not Set Numeric TBELs Using BPJ, but Did Use BPJ to Impose Monitoring Requirements in the Absence of Actual Data.

IEPA properly established monitoring requirements within the Permit for a large number of pollutants, including mercury, arsenic and selenium. Such was consistent with U.S. EPA guidance - "the permit writer might need to establish a monitoring-only requirement in the current NPDES permit to identify pollutants of concern and potential case-by-case limitations for the subsequent NPDES permit renewal."<sup>164</sup> The U.S. Court of Appeals for the District of Columbia has explained that it is appropriate for a permitting authority "to require a permittee simply to monitor and report effluent levels" because "[s]uch permit conditions might be desirable where the full extent of the pollution problem is not known."<sup>165</sup> Thus, in appropriate ircumstances, a BPJ analysis may conclude that monitoring requirements are appropriate. In

<sup>&</sup>lt;sup>163</sup> 47 Fed. Reg. 55290, 52303.

<sup>&</sup>lt;sup>164</sup> NPDES Permit Writers' Manual (2010) at Ch. 5, p. 5-47.

<sup>&</sup>lt;sup>165</sup> Natural Resources Defense Council, Inc. v. Costle, 568 F.2d 1369 (D.C. Cir. 1977).

fact, the Environmental Appeals Board has upheld an EPA-issued permit that imposed monitoring-only requirements based on BPJ.<sup>166</sup> IEPA did just that by imposing monitoring and reporting requirements in the Permit.<sup>167</sup>

## IV. IEPA'S ISSUANCE OF THE PERMIT MET ALL APPLICABLE PUBLIC PARTICIPATION REQUIREMENTS.

Petitioners complain that IEPA's Responsiveness Summary violated public participation requirements by not adequately responding to their TBEL public comments.<sup>168,169</sup> DMG disagrees; IEPA produced a responsiveness summary in accordance with public notice and participation requirements.<sup>170</sup> IEPA held a public hearing and issued a written response to comments, questions, and concerns.<sup>171</sup> IEPA went to great lengths at hearing and in its written responses to explain that the proposed discharges would result in no changes to water quality standards or existing uses.<sup>172</sup> Moreover, IEPA explained that it included monitoring requirements for the pollutants commenters suggested and that the Permit may be modified with public notice to establish effluent limitations if appropriate, based on information obtained through sampling.<sup>173</sup>

<sup>173</sup> Id.

<sup>&</sup>lt;sup>166</sup> In re Chukchansi Gold Resort, 2009 WL 152741 (Env. App. Bd. Jan. 14, 2009). In this case the Environmental Appeals Board upheld an NPDES permit issued by Region 9, which did not include an effluent limitation for phosphorus as a result of the Region's BPJ analysis. "Relying on its 'best professional judgment,' the Region decided not to include an effluent limit for phosphorus but instead required weekly monitoring for phosphorus and noted that, if future monitoring data suggest that phosphorus could be a problem, then EPA may re-open the permit to address the issue at that time." *Id.* at \*13. The EAB concluded that the petitioner did not raise any legal or factual basis for questioning the Region's conclusion that at the time the permit was issued there was not a reasonable basis on which to base a limit for phosphorus.

<sup>&</sup>lt;sup>167</sup> R. at 000858,000862, 000866 (NPDES Permit No. 0001571, Special Conditions 8, 21, Standard Condition 10).

<sup>&</sup>lt;sup>168</sup> Petitioners' Memo, p. 42.

<sup>&</sup>lt;sup>169</sup> Petitioners' claims regarding the Responsiveness Summary are made within their other arguments. For clarity, DMG responds to these claims in this Part IV, collectively.

<sup>&</sup>lt;sup>170</sup> R. at 000672, 000675 (describing pre-hearing public outreach).

<sup>&</sup>lt;sup>171</sup> R. at 000675 – 677.

<sup>&</sup>lt;sup>172</sup> See e.g., R. at 000688.

Like the federal regulations, Illinois regulations require a permit issuer to briefly describe and respond to all "significant comments" submitted on a draft permit during the public comment period.<sup>174</sup> The Environmental Appeals Board has considered this requirement and held that the permit issuer does not need to respond to comments in an individualized manner, nor must the response be of the same length or level of detail as the comment.<sup>175</sup>

Petitioners cannot accurately claim they were harmed or prejudiced in any way by a permitting process deficiency. Petitioners submitted pre- and post-hearing comments, and gave oral testimony. Moreover, even were the Responsiveness Summary somehow deficient (it was not), Petitioners' appeal rights were clearly not impaired. Presumably, a primary purpose of a responsiveness summary is to afford commenters and the public with sufficient knowledge on which to base an appeal. In the case of IEPA's decision to issue the Permit, such purpose was plainly satisfied. The Board should reject Petitioners' allegation that the Permit process violated public participation requirements and grant summary judgment in favor of DMG finding that IEPA issued the Permit consistently with the Act and Board regulations.

Third-party NPDES permit petitioners have alleged violations of 35 Ill. Admin. Code § 166.192 before.<sup>176</sup> In that instance, the Board recognized that Section 166.192 is an IEPA – not Board – rule, implying that the Board could not consider an alleged violation of such rule.<sup>177</sup> In its opinion and order, the Board acknowledged an alleged violation of Section 166.192, but made no decision regarding that section on the merits. Likewise in this appeal, the Board should find

<sup>&</sup>lt;sup>174</sup> 40 C.F.R. § 124.17(a)(2); 35 Ill. Adm. Code 166.192(a)(5) ("Section 166.192").

<sup>&</sup>lt;sup>175</sup> In re: Buena Vista Rancheria Wastewater Treatment Plant, E.A.B. (Sept. 6, 2011); In re: Circle T Feedlot, Inc., 14 E.A.D., slip op. at 30 (EAB June 7, 2010).

<sup>&</sup>lt;sup>176</sup> New Lenox, PCB 04-88 (Apr. 19, 2007).

<sup>&</sup>lt;sup>177</sup> Id., Fn. 2.

as a matter of law that any alleged violation of Section 166.192 cannot be addressed in this form and such claims must be dismissed.

#### **CONCLUSION**

IEPA issued the Permit in full compliance with the CWA, the Act, state and federal regulations, and relevant guidance, and there is simply no basis for Petitioners' claims. Furthermore, Petitioners have not carried their burden to refute IEPA's rationale articulated in the Responsiveness Summary and other Record documents and the Board should deny Petitioners' request to remand the Permit.

WHEREFORE, for the reasons state above, Dynegy Midwest Generation respectfully requests that the Board deny Petitioners' Motion for Summary Judgment grant Dynegy Midwest Generation's Cross Motion for Summary Judgment and grant any other relief the Board deems appropriate.

Respectfully submitted,

DYNEGY MIDWEST GENERATION.

an Bv Daniel Deeb

Dated: February 24, 2014

Daniel Deeb Amy Antoniolli Stephen Bonebrake SCHIFF HARDIN LLP 233 S. Wacker Drive, Suite 6600 Chicago, Illinois, 60606 Phone: (312) 258-5500

# **ATTACHMENT 1**

STATE OF TE DEPARTMENT OF ENVIRONM	ENNESSEE
IN THE MATTER OF:	) BEFORE THE BOARD OF ) WATER QUALITY, OIL, AND
TENNESSEE CLEAN WATER NETWORK and SOUTHERN ALLIANCE FOR CLEAN ENERGY,	) GAS ) )
Petitioners,	) CASE NO. WPC10-0116 )
v. TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION, Respondent,	) ) DOCKET NO. 04.30-110315A ) )
and	)
TENNESSEE VALLEY AUTHORITY, Intervenor.	) )

#### FINAL BOARD ORDER

This matter came to be heard before the Board of Water Quality, Oil and Gas upon the National Pollutant Discharge Elimination System (NPDES) permit appeal petition filed by the Tennessee Clean Water Network (TCWN) and Southern Alliance for Clean Energy (SACE) at an open public meeting of the Board on October 15th through 17th, 2013, at which a quorum was present. Petitioners TCWN and SACE were represented by Mary Whittle and Bridget Lee of Earthjustice and Stephanie Matheny of TCWN. The Tennessee Department of Environment and Conservation (TDEC) was represented by Patrick Parker and Austin Payne with the Office of General Counsel. The Intervenor Tennessee Valley Authority (TVA) was represented by Michael Stagg, Ed Callaway, Lauran Sturm, and Chris Hayes with the law firm of Waller Lansden Dortch and Davis, LLP. The Board read the stipulation of the parties, heard testimony,

reviewed exhibits, and listened to the argument of the parties. The Board considered the evidence introduced by the parties. At the close of Petitioners' case-in-chief, TDEC and TVA moved, pursuant to Tennessee Rule of Civil Procedure 41.02, for involuntary dismissal. The Board heard argument from all parties on the motion, and the Board also received the instructions of an Administrative Judge from the Office of the Secretary of State. After deliberation, the Board voted to adopt the following findings of fact, conclusions of law, reasons for decision, and order.

#### FINDINGS OF FACT

1. TDEC issued a renewal of NPDES permit TN0005410 on September 30, 2010, with an effective date of November 1, 2010 (Permit), Exhibit 1, authorizing the discharge of wastewater from TVA's Bull Run Fossil Plant into the Melton Hill Reservoir of the Clinch River.

2. Petitioners TCWN and SACE timely filed their petition for statutory appeal of the Permit with the Board on November 1, 2010, within thirty days of receiving public notice of the decision. Exhibit 2; Stipulation 21. The petition states that TDEC violated the Clean Water Act (CWA) and the Tennessee Water Quality Control Act (TWQCA) by issuing an NPDES permit to TVA that does not include any numeric technology-based effluent limitations for metals, Total Dissolved Solids (TDS) and other parameters aside from pH, Total Suspended Solids (TSS), and Oil and Grease. Exhibit 2.

3. Bull Run is a coal-fired power plant which began operation in 1967 with a capacity of approximately 950 megawatts. Stipulation 2.

4. To curb air emissions and achieve compliance with new federal and state air pollution standards, including the Tennessee Air Quality Act, TVA recently constructed and installed at Bull Run a flue gas desulfurization (FGD) system or scrubber. The scrubber became operational in December of 2008. Stipulation 6.

5. The discharge from Outfall 001 is comprised of FGD wastewaters, bottom ash sluicing waters, coal pile runoff, and other miscellaneous wastewater streams. Stipulation 9.

6. TVA operates a pond treatment system that abuts the Melton Hill Reservoir. The pond system includes a bottom ash disposal area, a gypsum disposal area, a sluice channel, a settling pond, and a stilling basin. All of these various wastewaters are eventually collected in the settling pond and, from there, flow into the stilling basin from which they are discharged through Outfall 001.

7. The current Environmental Protection Agency (EPA) Effluent Limitations Guidelines (ELGs) and standards — for the Steam Electric Power Generating Category that apply to low volume waste and ash transport waters were promulgated in 1982 and limit the following parameters: (1) pH and PCBs; (2) TSS; and (3) oil and grease. 40 C.F.R. § 423.12. Other toxic pollutants were considered but "excluded" from the regulation as they were "present in amounts too small to be effectively reduced by technologies known to the Administrator." Exhibit 75: 47 Fed. Reg. 52,290, 52,303 (Nov. 19, 1982).

8. EPA establishes national effluent guidelines for particular pollutants discharged at certain categories of the industry dischargers, thus relieving the agency from conducting these case-by-case determinations.

9. EPA's 1996 NPDES Permit Writers' Manual states: "It should be noted that prior to establishing [Best Professional Judgment] BPJ-based limits for a pollutant not regulated in an effluent guideline, the permit writer should ensure that the pollutant was not considered by EPA while developing the ELGs (i.e., BPJ-based effluent limits are not required for pollutants that were considered by EPA for regulation under the effluent guidelines, but for which EPA determined that no ELG was necessary)." Exhibit 76: US EPA NPDES Permit Writers' Manual, Chapter 5, pages 69-70 (Dec. 1996).

10. EPA's 2010 NPDES Permit Writers' Manual states, "[C]ase-by-case TBELs are established in situations where EPA promulgated effluent guidelines are inapplicable. That includes situations such as the following: . . . When effluent guidelines are available for the industry category, but no effluent guidelines requirements are available for the pollutant of concern (e.g., a facility is regulated by the effluent guidelines for Pesticide Chemicals [Part 455] but discharges a pesticide that is not regulated by these effluent guidelines). The permit writer should make sure that the pollutant of concern is not already controlled by the effluent guidelines and was not considered by EPA when the Agency developed the effluent guidelines." Exhibit 79: US EPA NPDES Permit Writers' Manual, Chapter 5, pages 5-45 to 5-46 (Sept. 2010).

On March 3<sup>rd</sup>, 2010, the EPA issued a letter approving the Bull Run Permit.
 Exhibit 6.

#### CONCLUSIONS OF LAW

1. The Petitioners have the burden of proof to show by a preponderance of the evidence that the Permit does not comply with the TWQCA. *See* Tenn. Code Ann. §§ 69-3-101, 69-3-105(i).

2. The existing 1982 ELG for power plants applied to Bull Run and established the discharge limits required to be set in the Permit. Because the 1982 ELG for power plants governs, a Best Professional Judgment (BPJ) analysis was not required.

3. In drafting the existing and applicable ELGs, EPA considered setting numeric limits for the metals identified in the petition but "excluded [these metals] from national regulation because they are present in amounts too small to be effectively reduced by technologies known to the Administrator." Therefore, TDEC was not legally required to conduct a BPJ analysis in issuing the Bull Run Permit.

4. Because TDEC issued the Permit in full compliance with the TWQCA and the CWA, there is no basis for Petitioners' claims. It was legally impossible for TDEC to have violated the law by voluntarily conducting a discretionary BPJ analysis. Tennessee Code Annotated Section 69-3-105(i) dictates that a permitting decision may be reversed or modified only "upon finding that it does not comply with any provisions of this part [of the Act]."

5. Federal and State regulations give TDEC's permit writers discretion to determine whether and when to develop additional limits for pollutants that are not covered by ELGs applicable to an industry waste category. TDEC was afforded such discretion when it concluded that additional effluent limits were unnecessary, because the pollutants in Bull Run's wastewater were not being discharged at levels likely to cause toxic effects. Therefore, TDEC had complete discretion to choose whether or not to impose BPJ limits in the Bull Run Permit.

6. In Tennessee, TDEC's permit writers' discretion also stems from the specific provisions contained in the TWQCA and implementing regulations. Specifically, Tennessee Code Annotated Section 69-3-108(g)(1) and Tennessee Rules 1200-04-05-.04(1)(f) and 1200-04-05-.08(1)(a) contemplate the permit writer being afforded discretion to impose additional effluent limitations, consistent with the CWA.

#### **RELIEF GRANTED**

The Motion to Dismiss filed by TDEC and TVA is granted.

#### **REASONS FOR DECISION**

The Board takes this action consistent with Tennessee law and regulations and consistent with its mission to protect waters of the state.

FOR THE TENNESSEE WATER QUALIT	Y, OIL AND GAS BOARD:
Hames W. Camprons	DATE: Duc. 4, 2013
Chairperson	

APPROVED FOR ENTRY:

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#### RIGHTS OF APPEAL

The Parties are hereby notified and advised of their right to administrative and judicial review of this FINAL ORDER, pursuant to the Tennessee Uniform Administrative Procedures Act, Tennessee Code Annotated Sections 4-5-317 and 4-5-322, and the Tennessee Water Quality Control Act, Tennessee Code Annotated Section 69-3-101 *et seq*.

Tennessee Code Annotated Section 4-5-317 gives any party the right to file a Petition for Reconsideration within ten (10) days after the entry of a FINAL ORDER, stating specific grounds upon which relief is requested.

Tennessee Code Annotated Section 4-5-322 and Section 69-3-101 *et seq.* provide any party the right to judicial review by filing a Petition in the Chancery Court of Davidson County within sixty (60) days of this FINAL ORDER becoming effective. A copy of this FINAL ORDER shall be served upon the Parties by certified mail, return receipt requested. This FINAL ORDER shall become effective upon entry.

Entered in the office of the Secretary of State, Administrative Procedures Division, this the  $/7/_{H_1}$  day of  $\sqrt{2}$  empty, 2013.

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Administrative Procedures Division

#### **CERTIFICATE OF SERVICE**

I, the undersigned, certify that on this 24th day of February, 2014, I have served electronically the attached **Respondent Dynegy Midwest Generation's Cross-Motion For Summary Judgment and Memorandum Of Law In Opposition To Petitioners' Motion For Summary Judgment And In Support Of Respondent Dynegy Midwest Generation's Cross-Motion For Summary Judgment**, upon the following persons:

John Therriault, Clerk Carol Webb, Hearing Officer Illinois Pollution Control Board James R. Thompson Center 100 West Randolph, Suite 11-500 Chicago, Illinois 60601

and electronically and by first class mail, postage affixed, upon:

Ann Alexander Meleah Geertsma Natural Resources Defense Council, Prairie Rivers Network, and Sierra Club 2 North Riverside Plaza, Suite 2250 Chicago, Illinois 60606

Stephanie Diers Division of Legal Counsel Illinois Environmental Protection Agency 1021 North Grand Avenue East P.O. Box 19276 Springfield, IL 62794-927 Gerald Karr Office of the Attorney General Environmental Bureau 69 West Washington Street Suite 1800 Chicago, IL 60602

Albert Ettinger Sierra Club 53 W. Jackson, #1664 Chicago, Illinois 60604

By: Amy Antoniolli

Dated: February 24, 2014

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