

**BEFORE THE ENVIRONMENTAL APPEALS BOARD  
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C.**

In re: )  
)  
) NPDES Appeal No. 20-05  
Granite Shore Power Merrimack LLC )  
)  
NPDES Permit No. NH0001465 )  
)

**REPLY BRIEF IN SUPPORT OF  
PETITION FOR REVIEW  
BY SIERRA CLUB AND  
CONSERVATION LAW FOUNDATION**

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## **TABLE OF ACRONYMS, ABBREVIATIONS, AND SYMBOLS**

(Generally matching those used in the Responses to Comments)

<b>APA</b>	Administrative Procedure Act
<b>AR</b>	Administrative Record
<b>BAT</b>	Best Available Technology Economically Achievable
<b>BIP</b>	Balanced Indigenous Population
<b>BPJ</b>	Best Professional Judgment
<b>BPT</b>	Best Practicable Technology
<b>CWA</b>	Clean Water Act
<b>EAB</b>	Environmental Appeals Board
<b>ELG</b>	Effluent Limitation Guidelines
<b>EPA</b>	Environmental Protection Agency
<b>GSP</b>	Granite Shore Power (current owner of Merrimack Station)
<b>NPDES</b>	National Pollutant Discharge Elimination System
<b>PSNH</b>	Public Service Company of New Hampshire (former owner of Merrimack Station)
<b>RTC</b>	Responses to Comments
<b>WQS</b>	Water Quality Standards
<b>°C</b>	Degrees Celsius

## TABLE OF ATTACHMENTS

<u>Att. No.</u>	<u>AR No.</u>	<u>Name</u>
44	AR-1551	Normandeau Environmental Consultants. "2012-2013 Data Supplement to the Merrimack Station Fisheries Survey Analysis of 1972-2011 Catch Data"
45	AR-871	Normandeau Environmental Consultants. "Merrimack Station Fisheries Survey Analysis of 1972-2011 Catch Data"
46	AR-196	Wisner, D.A., and A.E. Christie. 1987. "Temperature relationships of Great Lakes fishes: a data compilation"

Petitioners reply to the responses to the Petition for Review (“Pet.”) of the Region (“EPA Resp.”) and the Permittee (“GSP Resp.”).<sup>1</sup>

## I.

### INTRODUCTION

The Region describes re-permitting Merrimack Station as “a marathon run over an obstacle course.”<sup>2</sup> While it has undoubtedly taken a long time, regulating the Station’s waste heat discharges has been hampered not by an obstacle course, but by the Region reversing course just before the finish line.

EPA attempts to justify almost all of the drastic eleventh-hour changes to the Permit on the ground that the Station operates less frequently now than previously. But the Permit does *not* limit the Station to “peaking” operations. The capacity “limit” included for the first time in the final Permit is optional and, if GSP chooses to comply with it, merely allows the Station to avoid otherwise applicable numeric in-stream temperature limits (which are themselves weaker than proposed).

The Region admits that its approach to the final Permit emerged out of discussions with GSP beginning in 2018, *after* the last comment period.<sup>3</sup> Indeed, the Region *never*—not in 2011, 2014, or 2017—proposed *any* conditions based on reduced Station operations.

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<sup>1</sup> This reply uses the same abbreviations as the Petition, which are also defined in the table of abbreviations, *supra*.

<sup>2</sup> EPA Resp. at 1.

<sup>3</sup> *Id.* at 14–15, 23–24.



Significantly, in 2017 the Region “determined that the [Station’s] changing operating scenario *does not* provide a basis for altering . . . the [2011] permit limits” because, *inter alia*:

- “market conditions could change in the future, as they have in the past, and more frequent operations could be called for”; and
- even under the current operating profile “the Facility still operates at high rates in hot summer and cold winter conditions [and] its extensive operations during those periods can still potentially have serious environmental effects.” “For example, such shorter, but impactful periods could occur during the summer when the plant is in full operation during low river flow and high ambient temperature conditions.”<sup>4</sup>

“The Region’s view changed,” it now says, in early 2018 when GSP “indicated a potential willingness to accept permit limits based on reduced operations.”<sup>5</sup> But the key facts have *not* changed: the Station still operates during “impactful periods” when river flows are low and ambient temperatures are high;<sup>6</sup> and the frequency of operations may increase at any time during the permit cycle (which might last more than 25 years).<sup>7</sup>

In addition to abandoning technology-based numerical limits on discharges of total heat (which was EPA’s proposal from 2011–2017), replacing them with in-stream temperature limits, and then exempting the Station from many of those

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<sup>4</sup> 2017 Statement at 68–69, 39–40 (emphasis added).

<sup>5</sup> EPA Resp. at 14.

<sup>6</sup> Pet. at 49–52.

<sup>7</sup> The Region admitted: “Of course, EPA cannot be certain how the energy markets will evolve. Only a relatively short time ago, the relative growth in natural gas-powered generation was not foreseen.” RTC III-110, n.62.

limits from May to September if a capacity factor test is met, the Region also systematically weakened the Permit in other respects by relaxing the in-stream limits and removing the narrative limitations on the thermal plumes that serve as critical “backstops.”

Even if the capacity factor “limit” actually restricted Station operations (which it does not), EPA would nevertheless have to demonstrate that operating as a “peaker” *assures* protection of the BIP, which it has not done. Significantly, the Region’s last-minute reversal extended beyond the Permit conditions themselves to the level of proof and degree of conservatism that EPA applied to its determination. In 2011, EPA recognized that the burden of proof under § 316(a) is stringent one, that permit writers may not speculate in the absence of evidence, and that EPA should take a “conservative approach,” with the “greater the risk, the greater the degree of certainty . . . required.”<sup>8</sup> EPA then applied those principles in determining that PSNH’s retrospective and prospective demonstrations failed to satisfy § 316(a), a determination it arrived at following “a detailed independent evaluation”<sup>9</sup> of “compelling evidence of appreciable harm.”<sup>10</sup>

In contrast, the Region’s 2020 conclusion that peaker operations would protect the BIP is based on a paucity of evidentiary support: one study from 2012–2013, and another from 2010–2013, which EPA describes in extremely tentative

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<sup>8</sup> 2011 Determinations at 24–26 (citations omitted).

<sup>9</sup> *Id.* at 28.

<sup>10</sup> *Id.* at 118; *see id.* at 29–121 (extensive discussion of evidence of harm).

terms as “suggesting” what “may be” the “possible state of the BIP.”<sup>11</sup>

In the end, the Permit resulted from a host of discretionary decisions by the Region to systematically dismantle technology-based and water-quality-based requirements, weaken numeric limits, remove narrative limits, and attempt to narrow the standard prohibition on WQS violations through a response to comment. This was all based on a novel and unfounded supposition—that the BIP *may* be recovering, *possibly* due to reduced Station operations, that the Permit will keep it that way, and that this *assures* protection of the BIP. Whether it signals a new trend in permitting by Region 1 or is merely an aberration, the Permit involves numerous important policy considerations that the Board should, in its discretion, review under § 124.19(a)(4).

The Board should also review and remand the Region’s decision not to set more stringent case-by-case BAT limits for combustion residual leachate discharges. The Region unlawfully and erroneously determined that BAT requirements for leachate in the Permit need not require anything beyond the level EPA set under BPT for this wastestream in 1982. In response to the Petition, the Region has incorrectly characterized its case-by-case determination in an effort to avoid the overwhelming record built by EPA at the national level that the 1982 BPT standards are outdated, inadequate, and ineffective to meet BAT requirements for leachate—a record which resulted in the Fifth Circuit vacating those standards as BAT standards in the applicable ELGs. Because there are no longer applicable

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<sup>11</sup> See *infra* at 12–15.

BAT-based effluent limits for leachate, CWA § 301 and 40 C.F.R. § 125.3 require the Region to use BPJ to establish case-by-case BAT limits for leachate in the Permit.

## II.

### ARGUMENT

#### **A. The Permit’s Thermal Discharge Conditions and Decisions Should Be Reviewed and Remanded.**

##### **1. The Permit’s Substantial Changes Were Not Reasonably Foreseeable from the Draft Permit or Public Notices.**

Where a “final rule deviates too sharply from the proposal, affected parties will be deprived of notice and an opportunity to respond.”<sup>12</sup> Thus, a final permit violates the APA unless “interested parties reasonably could have anticipated the final [permit] from the draft permit.”<sup>13</sup>

Referring to the very substantial differences between the draft and final permits, the Region claims that “[t]he crux of the issue is not whether there has been a switch between the proposed and final actions, but whether the change is

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<sup>12</sup> *Small Refiner Lead Phase-Down Task Force v. EPA*, 705 F.2d 546, 547 (D.C. Cir. 1983).

<sup>13</sup> *NRDC, Inc. v. EPA*, 279 F.3d 1180, 1186 (9th Cir. 2002) (citation and quotation omitted); *see also Long Island Care at Home, Ltd. v. Coke*, 551 U.S. 158, 174 (2007), (“the final rule the agency adopts must be a logical outgrowth of the rule proposed”). While GSP argues that the reference point should be the “public comment process” as a whole (GSP Resp. at 18 (citing *In re City of Palmdale*, 15 E.A.D. 700, 714 (EAB 2012))), the Supreme Court in *Long Island Care*—as well as many other judicial and EAB decisions and EPA—frame the issue as whether the final is a logical outgrowth of the draft. *See, e.g.*, EPA Resp. at 19. While EPA could provide fair notice and an opportunity to comment in a public notice issued with or after the draft permit, it did not do so here.

truly a *surprise*.”<sup>14</sup> EPA then attempts to argue that all of the changes were “reasonably foreseeable” on the theory that they “stem from a range of alternatives described with reasonable specificity . . . at the proposal stage of the proceedings.”<sup>15</sup> But this is plainly not so.

The capacity factor provision—which *exempts*<sup>16</sup> GSP from the requirement to comply with in-stream temperature limits from May to September when the Station’s 45-day-rolling-average electricity generation is below 40%—was neither in the draft permits nor described in the 2011, 2014, or 2017 public notices. It was not described at all, much less with “reasonable specificity.” Nor was there any variant of that provision or a range of alternative provisions relating to capacity included in any draft permit or described in any public notice. Indeed, EPA admits that the provision was developed *after* GSP acquired the Station in 2018.<sup>17</sup>

EPA nevertheless claims that the 2017 Statement gave sufficient notice.<sup>18</sup> But that statement said that “EPA has determined that the changing operating scenario does not provide a basis for altering what would otherwise be the permit

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<sup>14</sup> EPA Resp. at 20 (citations omitted).

<sup>15</sup> *See id.* (citation omitted).

<sup>16</sup> EPA and GSP take issue with the term “exemption,” instead calling it a “limit” or a “different measure of compliance.” EPA Resp. at 37; GSP Resp. at 33–34. Such semantics belie the fact that the provision relieves GSP from compliance with weekly-average temperature limits when the capacity factor is met and thus functions as an exemption from otherwise applicable limits. Permit, § I.A.11, n.6.

<sup>17</sup> EPA Resp. at 28.

<sup>18</sup> *Id.* at 28.

limits,” and invited comment generally “on what effect, if any, Merrimack Station’s reduced capacity utilization rate should have on the limits for the Facility’s new Final NPDES Permit.”<sup>19</sup> As the D.C. Circuit explained in *Small Refiner Lead Phase-Down*, where EPA similarly failed to provide the required specificity:

[T]he test . . . is whether [commenters], *ex ante*, should have anticipated that such a requirement might be imposed. We think not. The connection between EPA’s request for comments and the [final] requirement is simply too tenuous.

EPA also argues that it gave general notice that it might make unspecified changes in the definition . . . . This purported notice, however, is too general to be adequate. Agency notice must describe the range of alternatives being considered with reasonable specificity. Otherwise, interested parties will not know what to comment on, and notice will not lead to better-informed agency decisionmaking.<sup>20</sup>

Here, EPA’s notice that it might take reduced operations into account in some unspecified manner was too general to enable anyone to predict the 40%-capacity, 45-day-rolling-average exemption from in-stream temperature limits. Petitioners were thus deprived of proper notice of that provision.

Similarly unforeseeable was the Region’s decision to eliminate S-0 (the monitoring station at the end of the discharge canal) as the compliance point for acute in-stream temperature limits given EPA’s recognition that “[s]ince the highest water temperatures from the plant exist closest to the discharge point, the potential for the thermal plume to cause acute lethality or impairment to drifting organisms,

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<sup>19</sup> 2017 Statement at 68–69.

<sup>20</sup> *Small Refiner Lead Phase-Down*, 705 F.2d at 548–49 (citations omitted).

such as fish larvae, is most likely to occur in the waters near the discharge,”<sup>21</sup> and the fact that, in the 2011 Draft Permit, the Region proposed *adding* a fourth narrative thermal plume limitation, stating: “Any thermal plume . . . shall . . . not cause acute lethality to swimming or drifting organisms, including those entering the discharge canal at Outfall 003.”<sup>22</sup> Having expressed significant concern about lethality at or near the discharge canal and developed a new effluent limitation to prevent it, EPA gave no hint that it might later decide to eliminate *all* temperature limits near the discharge.

Likewise, there was no notice that EPA might eliminate not only that fourth thermal plume limitation but also the three others that are in the 1992 Permit, the 2011 and 2014 Draft Permits, and NPDES permits for most other power plants on rivers in Region 1.<sup>23</sup> EPA acknowledges that “these narrative provisions were derived from narrative water quality criteria and mixing zone elements in NH’s WQS,”<sup>24</sup> but then argues, incorrectly, that “the 2011 Variance Alternative did not . . . include the WQS-based thermal limits.”<sup>25</sup> In fact, when referring to that

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<sup>21</sup> 2011 Determinations at 83.

<sup>22</sup> 2011 Draft Permit, § I.A.23.

<sup>23</sup> See RTC II-328 – II-331 & nn.53–60 (discussing five other permits with highly similar thermal plume limitations).

<sup>24</sup> EPA Resp. at 43 (citing N.H. Code R. Env-Wq 1707.02, 1703.01(c) and 2011 Determinations at 174–78, 187). See also 2011 Determinations at vii (prior permit “imposed various narrative conditions requiring protection of the river’s water quality and its aquatic life”).

<sup>25</sup> *Id.* at 44.

alternative EPA stated only that it was considering replacing the numeric technology-based requirements with numeric water-quality-based requirements, not that it might eliminate the standard narrative water-quality-based effluent limitations that specifically restrict the thermal plume.<sup>26</sup>

Likewise, EPA's decision to grant a variance *from* water-quality-based requirements was not reasonably foreseeable from the Region's statements that it was considering basing permit limits on water-quality-based requirements. In 2011, EPA stated that it "considered . . . including the water quality-based thermal discharge limits to satisfy water quality requirements based on a variance from federal technology-based requirements under CWA § 316(a)."<sup>27</sup> EPA did *not* state that it was considering basing thermal limits on a § 316(a) variance from *both* technology-based *and* state water-quality-based requirements.

EPA has also not identified any prior notice of its last-minute attempt to narrow (through a response to comment) the standard prohibition on violations of WQS. GSP argues that "it was only logical and to-be-expected" that EPA would not "add a provision . . . that requires compliance with [WQS]."<sup>28</sup> But EPA did not need to add it. Like the thermal plume limitations, the WQS violations prohibition is in the 1992 Permit, the 2011 and 2014 Draft Permits, and many other NPDES permits, including for other power plants in Region, whether or not they received a

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<sup>26</sup> See 2011 Determinations at 217.

<sup>27</sup> *Id.*

<sup>28</sup> GSP Resp. at 23.



§ 316(a) variance.<sup>29</sup> Part I.A.12 prohibits violations of “the water quality standards of the receiving water,” and nothing in any of the notices suggested a potential narrowing of that permit term to certain “standards of the receiving water” and not others.

Where, as here, a final permit is “surprisingly distant” from the draft permit and Petitioners would have had to “divine [the agency’s] unspoken thoughts,” the final permit fails the logical outgrowth test and violates the APA.<sup>30</sup> The Permit should be remanded for a reopening of the comment period.<sup>31</sup>

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<sup>29</sup> See RTC II-330.

<sup>30</sup> *CSX Transp., Inc. v. Surface Transp. Bd.*, 584 F.3d 1076, 1080 (D.C. Cir. 2009).

<sup>31</sup> GSP argues that Petitioners “waived their challenge to EPA’s decision not to issue a new draft permit” by not telling the Region in 2017 that future changes that are not a “logical outgrowth” of the proposal must be presented in a new draft permit, accompanied by a new comment period. GSP Resp. at 19–21. However, a commenter is obviously not obligated to tell an agency that any changes to a proposal that arise after the comment period may require further comment. Indeed, EPA referred to the “logical outgrowth” doctrine in the 2017 Statement (at 10–12), demonstrating that it was so aware.

GSP also argues that EPA’s failure to reopen the comment period certain changes was “harmless error” having “no bearing” on the decision. GSP Resp. at 24 n.13. But that assumes that the Permit was preordained, with further comment incapable of having an effect on the outcome. When they discovered through FOIA that the EPA-GSP “discussion drafts” were so radically different, Petitioners sought an opportunity to comment with the assistance of technical expertise and provided a list of issues on which comment was warranted. Att. 35 (AR-1688) at 20–22. The denial of the opportunity to comment on the new terms—and on EPA’s supporting rationale—denied Petitioners their rights of public participation and harmed their interests.

**2. The Permit Does Not Assure Protection of the BIP, as Required by CWA § 316(a).**

The CWA prohibits the granting of a § 316(a) variance unless “alternative” limitations for waste heat “will *assure* the protection” of the BIP.<sup>32</sup> In 2011, the Region recognized that Congress intended this as a “very limited waiver” to be granted only where entitlement to a variance has been “establish[ed] beyond any question,” that the “burden of proof in a 316(a) case is a stringent one,” that it is the applicant’s burden, that permit writers “may not speculate [where] evidence is lacking,” that EPA “should take a conservative approach to assessing variance applications,” with the “greater the risk, the greater the degree of certainty . . . required,” and that if “deficiencies in information are so critical as to preclude reasonable assurance, then alternative effluent limitations should be denied.”<sup>33</sup>

The risk of harm to the Hookset Pool from the Station’s waste heat is great, as EPA determined in 2011<sup>34</sup> and reaffirmed in 2020.<sup>35</sup> Moreover, such harm is not merely a “risk,” it is a reality: EPA determined that the thermal discharges have already caused “appreciable harm,” which will continue to occur under baseload

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<sup>32</sup> 33 U.S.C. § 1326(a) (emphasis added).

<sup>33</sup> 2011 Determinations at 24–26 (citations omitted); *see also* Pet. at 5-11.

<sup>34</sup> 2011 Determinations at 37 (“aquatic habitat in Hooksett Pool [is] particularly vulnerable to the effects of Merrimack Station’s thermal discharge”), 118 (“EPA concludes that that the capacity of the plant’s thermal discharge to adversely impact the balanced, indigenous fish community of Hooksett Pool is significant”).

<sup>35</sup> RTC II-338 (“Station’s ‘capacity’ to adversely impact the Hooksett Pool’s fish community remains relatively unchanged since EPA released its 2011 draft permit”).

operations.<sup>36</sup> In its response, the Region states again: “This has not changed.”<sup>37</sup>

Section 316(a) therefore imposes a heavy burden to establish with certainty, based on sufficient record evidence, that future Station operations under the Permit will assure protection of the BIP despite decades of harm. Furthermore, given that the Permit’s new thermal limits for warmer months (May–September) will be *either* the weekly-average temperature limits *or* the capacity factor limit—at GSP’s sole option<sup>38</sup>—*both* sets of limits must be independently certain to protect the BIP. The record, however, fails to support a conclusion that *either* limit will assure BIP protection.

The Region claims that it based the new limits, in part, on what it calls “evidence of recovering fish populations” associated with reduced thermal discharges.<sup>39</sup> But the only support EPA cites are pages from its own Response to Comment, and those pages, in turn, cite to only a *single fisheries study* submitted by PSNH’s consultant, containing “standardized electrofishing data” from two years,

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<sup>36</sup> See Pet. at 21–25.

<sup>37</sup> EPA Resp. at 29–30 (referring to Region’s decision to reject the variance based on baseload operations). See also RTC II-300 (same); Pet. at 31 n.127.

<sup>38</sup> Permit, § I.A.11, n.6.

<sup>39</sup> EPA Resp. at 15 (citing, for this point among others, RTC II-11 – II-12, II-14 – II-16, II-116 – II-119, II-204 – II-205, II-216 – II-217, II-337 – II-338); see also EPA Resp. at 28, 47 (“recovering fish community”) (citing RTC II-120, II-13, II-48 – II-61).

2012 and 2013.<sup>40</sup> EPA’s conclusions regarding the “current” state of the BIP are based *entirely* on that report, which EPA describes as the “most recent fisheries report,”<sup>41</sup> and an earlier report, dated December 2011, containing fisheries data from 2010–2011.<sup>42</sup> Such scant evidence is insufficient to support the granting of a variance, especially since there are “aspects to these studies that EPA has concerns about.”<sup>43</sup>

Tellingly, given this meager evidentiary support, EPA is extremely tentative and equivocal when attempting to draw conclusions from it. For example, EPA says merely that the “recent [*i.e.*, 2010-2013] data is *encouraging* regarding the *possible* state of the BIP” and “*suggests* thermal conditions in Hooksett Pool *may* be improving. . . . This *could* reflect a biological benefit from the reduction in operations at Merrimack Station.”<sup>44</sup>

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<sup>40</sup> Att. 44 (AR-1551; Normandeau Environmental Consultants, “2012-2013 Data Supplement to the Merrimack Station Fisheries Survey Analysis of 1972-2011 Catch Data”).

<sup>41</sup> RTC II-185 – II-186, II-204.

<sup>42</sup> Att. 45 (AR-871; Normandeau Environmental Consultants, “Merrimack Station Fisheries Survey Analysis of 1972-2011 Catch Data”). EPA refers to AR-1551 and AR-871 as the “two most recent fisheries reports” from PSNH’s consultant (RTC II-210), but neither is cited in or attached to EPA’s response to the Petition.

<sup>43</sup> RTC II-337.

<sup>44</sup> RTC II-216 (emphasis added). In a similar discussion, EPA likewise prevaricates that 2012-2013 data “*suggest* that temperature-sensitive fish species are inhabiting the lower section of Hooksett Pool *more* during the months of August and September,” that there is “*some evidence* that the negative trend in yellow perch abundance had improved to the extent that a negative trend was no longer *detectable*” and that “these encouraging changes to trends within the Hooksett Pool

This is a far cry from the level of evidentiary support and regulatory certainty needed to assure protection of the BIP under the approach that EPA itself espoused in 2011. A limited amount of older data “suggesting” what “may be” the “possible state of the BIP,” and which “could” reflect reduced Station operations, not only falls well short of the § 316(a) standard of proof but also stands in stark contrast to the extensive evidentiary support and independent agency analysis on which EPA based its 2011 finding of appreciable harm.<sup>45</sup> At that time, “[a]fter a lengthy assessment, EPA . . . concluded that the thermal discharge from Merrimack Station has indeed been inimical to aquatic life in the Hooksett Pool”<sup>46</sup> based on “compelling evidence [that] the thermal discharge . . . has appreciably harmed the balanced, indigenous community of Hooksett Pool,”<sup>47</sup> as discussed in nearly 100 pages of its 2011 Determinations and summarized in twenty-two numbered paragraphs—without the uncertainty or vacillation evident in 2020.<sup>48</sup>

The Region’s 2020 determination echoes the pre-2011 state of affairs when, as EPA frankly admitted, permits were issued to the Station despite a “dearth of

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fish community . . . *could be* indicative of a recovering BIP.” *Id.* II-338 (emphasis added).

<sup>45</sup> 2011 Determinations at 29–121.

<sup>46</sup> *Id.* at 178.

<sup>47</sup> *Id.* at 116.

<sup>48</sup> *Id.* at 29–121 (extended discussion of evidence), 116–120 (summaries of “Evidence of Appreciable Harm” and “Merrimack Station’s Thermal Impact on Hooksett Pool”).

thermal discharge information”<sup>49</sup> and the variance determinations were “based on the facility’s assessment of its own data” without an independent EPA assessment.<sup>50</sup> Unfortunately, after having conducting a thorough, independent analysis in 2011, the Region’s 2020 reversal is again based on a dearth of information and lack of independent analysis regarding the current state of the BIP and whether operating at high capacity seasonally, as opposed to year-round, will reverse the documented appreciable harm to the Hooksett Pool and *assure* protection of the BIP going forward.<sup>51</sup>

Beyond this glaring lack of evidence, the Permit’s thermal provisions do not satisfy § 316(a) for other important reasons. First, the Region claims that the Permit “ensures that the current operation of the Station continues during the next permit cycle.”<sup>52</sup> This, paired with the unsupported theory regarding a potentially “recovering BIP,” is the crux of EPA’s argument. But the new Permit conditions do not ensure that current operations continue for any period of time, much less throughout the permit cycle—which, if EPA’s pace for renewing the 1992 Permit is any guide, might extend more than 25 years. Notably, the capacity factor provision does not require the Station to operate below 40% capacity or at any other level. To

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<sup>49</sup> EPA Resp. at 11; *see also* 2011 Determinations at 13 (“dearth of information”).

<sup>50</sup> *Id.* at 27.

<sup>51</sup> *See* RTC II-204 (“new fisheries data *suggest* conditions *may be* improving, . . . [but] EPA *did not run its own analysis*”) (emphasis added).

<sup>52</sup> RTC II-120.

the contrary, if the Station operates at 50%, 60%, or 70% capacity, that does *not* constitute a permit violation. Instead, it merely means that GSP is not exempt from the weekly-average temperature limits during that period.<sup>53</sup> Furthermore, as discussed in the Petition, by selecting 40% as the capacity factor “limit,” the Permit would allow the Station to double, triple, or quadruple its recent operations and still not be subject to the weekly-average temperature limits.<sup>54</sup>

When they apply, the temperature limits are insufficient to assure protection of the BIP.<sup>55</sup> Had EPA required the Station to comply with *both* the capacity factor limit and the chronic temperature limits, EPA could attempt to argue that it had added an additional set of limits as a measure of conservatism. But, here, EPA constructed the capacity factor limit as an exemption from chronic temperature limits, while simultaneously weakening those limits, moving the compliance point for acute temperature limits away from the discharge, and eliminating the narrative effluent limitations on the thermal plume.

Moreover, the Region’s hope that the Station will continue at recent operational levels is contradicted by its own statements. For example, after observing that the recent change to mostly seasonal (winter and summer) operations resulted from a shift towards natural gas-fired plants, EPA then readily admitted: “Of course, EPA cannot be certain how the energy markets will evolve.

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<sup>53</sup> Permit, § I.A.11, n.6.

<sup>54</sup> Pet. at 51.

<sup>55</sup> *Id.* at 44–57, 62–63.

Only a relatively short time ago, the relative growth in natural gas-powered generation was not foreseen.”<sup>56</sup> EPA candidly acknowledged that “[w]riting permit limits based on current, reduced operations would be inappropriate and ineffectual if after the permit was issued the Facility could resume operating at a higher level and cause greater adverse effects.”<sup>57</sup> Yet that is exactly what the Region allowed here. The Permit neither requires the Station to operate like a “peaker,” nor assures that its thermal discharges will protect the BIP at any level of operation.

Next, despite admitting that the River will be hotter at S-0, near the discharge canal,<sup>58</sup> the Region argues that it was not clear error for the Permit to base compliance with temperature limits *solely* at a downriver monitoring station, S-4. EPA attempts to defend this last-minute change on the ground that it has included a 2°C “buffer” in the temperature limit at S-4 by “set[ting it] at 2°C less than the lethal limit.”<sup>59</sup> But the 2°C buffer will not prevent acute lethality for several reasons. To begin with, EPA simultaneously *increased* the “lethal limit” by 1.8°C, from 31.5°C to 33.3°C,<sup>60</sup> despite acknowledging significant uncertainty as to

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<sup>56</sup> RTC III-110, n.62. For example, hydrofracking restrictions would reduce natural gas supplies and increase prices.

<sup>57</sup> RTC II-76; *see also id.* II-117 (same).

<sup>58</sup> 2011 Determinations at 83.

<sup>59</sup> EPA Resp. at 31–32 (quoting RTC II-131).

<sup>60</sup> RTC II-130.



where that limit should be set.<sup>61</sup> This 1.8°C increase nearly completely offsets the 2°C “buffer” and results in an acute temperature limit in the Permit that is only 0.2°C lower than the acute limit that EPA previously said is necessary to protect larva. Second, EPA acknowledges that, “[i]n many cases, Station S4 temperatures were 26°C or less when the Station S0 temperature exceeded 31.3°C,”<sup>62</sup> a difference of more than 5.3°C between the two monitoring stations. The 2°C buffer is plainly insufficient because it allows temperatures to exceed even EPA’s increased lethal limit by more than 3.3°C at S-0, causing mortality there, while temperatures remain in compliance with the limit measured at S-4.

The Region further argues that “the duration of exposure for a drifting organism travelling from S0 to S4 will be sufficiently protective to *prevent* mortality.”<sup>63</sup> But in 2011 EPA stated:

[I]t could take an American shad larva one to two hours to drift from Station S-0 to S-4, . . . . Either flow rate provides sufficient exposure of drifting American shad larvae to plume temperatures that could cause lethality during most of June and July.<sup>64</sup>

In 2011, EPA also cited studies observing lethality to larvae after 10 to 15 (or, at

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<sup>61</sup> *Id.* II-71 (“The agency realizes that it may not be possible to accurately predict acclimation temperature or exposure time for organisms in Hooksett Pool and, as such, we cannot be certain how closely the critical temperatures identified in laboratory studies would be mirrored in Hooksett Pool.”).

<sup>62</sup> RTC II-55; *see also id.* II-99 (temperature difference from S-0 to S-4 can be as high as 10°C).

<sup>63</sup> EPA Resp. at 31 (quoting RTC II-131) (emphasis added).

<sup>64</sup> 2011 Determinations at 204.

most, 60) minutes of exposure to elevated temperatures,<sup>65</sup> cited those same studies in the 2020 RTC for the same point,<sup>66</sup> and did not cite any study showing that transit time would be faster or lethal exposure time would be longer.

Although the agency tries to downplay it by using the conditional verb “could” twice in the same sentence, EPA nevertheless had to admit that the new Permit will *not* prevent acute mortality to fish larva:

[I]n a low flow year, when ambient temperature are high and the Facility is operating both units or just Unit 2[], there *could be* elevated temperatures from the end of the discharge canal (Station S0) 2,000 feet downstream to Station S4 (and potentially beyond) that *could possibly* result in some mortality (i.e., at or above the upper incipient lethal temperature) to drifting organisms.<sup>67</sup>

Although EPA hopes that such mortality will be “limited and unusual under the limits of the Final Permit,”<sup>68</sup> there is no support for this argument either, given that the capacity factor limit is optional—GSP can choose to exceed it and instead seek to comply with the weekly-average (chronic) temperature limits (also measured at S-4), which are not even designed to address acute mortality.

In addition to these glaring deficiencies, the Permit also fails to assure protection of the BIP due to the removal of the effluent limitations specifically protecting zones of fish passage, shoreline habitat, and the area nearest the

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<sup>65</sup> *Id.* at 104, 190 (citing Att. 46 (AR-196) Wismer, D.A., and A.E. Christie. 1987. “Temperature relationships of Great Lakes fishes: a data compilation”).

<sup>66</sup> RTC II-55, II-118 – II-119.

<sup>67</sup> RTC II-131(emphasis added).

<sup>68</sup> EPA Resp. at 31 (quoting RTC II-131).

discharge canal from the thermal plumes.<sup>69</sup> EPA contends it “found that the Final Permit’s limits would result in *adequate* zones of passage for fish swimming past the facility,” even without the explicit prohibition on blocking zones of passage.<sup>70</sup> But the RTC discussions EPA cites do not support such “finding”; in fact, they directly contradict it. For example, EPA admitted:

[N]either the thermal modeling nor the actual temperature data clearly demonstrate that an adequate zone of passage is available under conditions when the Facility is operating at full capacity and ambient temperatures are highest (e.g., summer), particularly during years with low river flow. If temperatures are at or above avoidance levels across the river in July and August, it may impede movement of resident fish past the Facility and exclude fish from available foraging and refuge habitat near the discharge canal. If these conditions persist for weeks or even months, as can occur under baseload operations, there may be sub-lethal impacts on growth, competition, and survival. . . . If the Facility operates at high capacity during July and August in years with low flow and high ambient temperatures, resident fish may avoid moving past the Facility due to temperatures in the thermal plume.<sup>71</sup>

Once again, as discussed above and in the Petition, the capacity limit is optional and even if GSP opts to comply with it in lieu of chronic temperature limits, the 45-day rolling average calculation allows the Station to operate at 100% capacity for 18 consecutive days in July and/or August, or, for example, at 75% capacity for 24 consecutive days, or 50% capacity for 36 consecutive days, or for shorter consecutive periods with correspondingly shorter down periods between runs of high capacity.<sup>72</sup>

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<sup>69</sup> 2011 Draft Permit, § I.A.23.

<sup>70</sup> EPA Resp. at 49–50 (emphasis added).

<sup>71</sup> RTC II-87.

<sup>72</sup> See Pet. at 49.

EPA itself characterizes shorter, seasonal periods of operation (*e.g.*, 18 consecutive days) as “operat[ing] *at baseload*” for that period of time.<sup>73</sup>

EPA also states that it “found that the Final Permit’s limits would protect nearshore spawning habitat” despite the elimination of the narrative prohibition against excessive thermal plume contact with shorelines.<sup>74</sup> The RTC explanation EPA cites states that “the protective temperature limits at Station S4 will ensure that nearshore spawning habitat at and downstream from the Station S4 transect is also protected.”<sup>75</sup> But there is no support for this incorrect and misleading supposition either, given that monitoring station S-4 is a single point in the River,<sup>76</sup> not a “transect,”<sup>77</sup> and is not located on *either* of the two shorelines, as EPA is well aware. EPA has not explained why a thermal plume travelling down the near (western) shoreline of the River would necessarily cause an exceedance of the temperature limits at S-4 towards the center of the channel. Nor has EPA explained how the chronic temperature limits can protect shoreline habitat if GSP chooses to comply with the generous capacity factor limit instead.

With respect to “cold shock,” the Region moved to strike attachments containing 15-minute data from winter months that EPA improperly failed to

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<sup>73</sup> RTC II-103 (emphasis added).

<sup>74</sup> EPA Resp. at 50; *see also id.* at 34.

<sup>75</sup> RTC II-125 – II-126.

<sup>76</sup> *See* Permit I.A.11 (giving latitude/longitude for S-4).

<sup>77</sup> A “transect” is a straight line along which measurements are taken.

request from GSP for its record.<sup>78</sup> Alternatively, the Region now claims that cold shock was never more than a “theoretical concern” or a “theoretical issue” or a “theoretical risk.”<sup>79</sup> But in 2011, EPA took seriously the issue of winter effects in the discharge canal,<sup>80</sup> and its reversal on this point is also notable.

A permit issuer must articulate the reasons supporting its conclusions with reasonable clarity.<sup>81</sup> When a “permitting authority provides inconsistent or conflicting explanations for its actions, the Board frequently concludes that the Region’s rationale is unclear and remands for further clarity.”<sup>82</sup> Here, because the Region has given inconsistent or conflicting explanations and lacks evidence to support its new conclusions as to the condition of the BIP, the effect of Station operations on various aspects of the BIP, and the ability of the Permit to assure that the appreciable harm does not continue, the Permit falls well short of what is required by § 316(a).

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<sup>78</sup> Petitioners’ opposition to the motion is filed herewith.

<sup>79</sup> EPA Resp. at 41.

<sup>80</sup> *See, e.g.*, 2011 Determinations at 198 (“thermal conditions within the discharge canal are not protective of yellow perch during their winter period of gonadal development or their spring spawning period. . . . Therefore, water quality-based requirements would call for a barrier capable of preventing adult yellow perch from entering into the discharge canal”), 349 (same).

<sup>81</sup> *In re Ash Grove Cement Co.*, 7 E.A.D. 387, 417 (EAB 1997).

<sup>82</sup> *In re Chukchansi Gold Resort*, 14 E.A.D. 260, 280 (EAB 2009).

### 3. The Region’s Explanations Regarding Water Quality Standards Are Inconsistent and Incorrect.

The Region’s explanations regarding compliance with WQS also lack the required clarity. In 2011, “EPA concluded that maintaining protective temperatures in the river was necessary to satisfy the NHWQS.”<sup>83</sup> EPA then determined that BAT-based limits on the amount of heat discharged would *always* avoid an exceedance of those protective temperature thresholds.<sup>84</sup> As an alternative, EPA said it might grant a § 316(a) variance from technology-based requirements and instead include the in-stream temperature limits—*i.e.*, the ones necessary to satisfy the NHWQS—in the permit.<sup>85</sup>

Remarkably, the Region now states that it decided to grant a variance *from* water-quality-based requirements<sup>86</sup> and to issue a Permit that does *not* require the Station to comply with thermal WQS,<sup>87</sup> yet the Permit itself *does* comply with those same WQS.<sup>88</sup> EPA’s new contorted rationale appears to suggest that a provision of state law automatically reduces the stringency of codified NH WQS to match any weaker limits that EPA might choose to impose under § 316(a).<sup>89</sup> However, the

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<sup>83</sup> 2011 Determinations at 214; *id.* at xiii (same).

<sup>84</sup> *Id.*

<sup>85</sup> *Id.* at 217.

<sup>86</sup> RTC I-9 – I-10.

<sup>87</sup> EPA Resp. at 50.

<sup>88</sup> *Id.* at 49, 50.

<sup>89</sup> *See* EPA Resp. at 4–5, 49.

state statute EPA cites has never been interpreted in that manner<sup>90</sup> and does not, on its face, support EPA’s argument. To the contrary, the provision prevents NHDES from “prescribing minimum treatment provisions” that are less stringent than the stricter of the “water quality requirements and recommendations” of EPA, a state agency, and an interstate commission.<sup>91</sup> It does not provide that whenever EPA issues a final NPDES permit under § 316(a), any more stringent regulations codified in New Hampshire’s WQS must automatically be re-written or otherwise give way to weaker limits in the permit.<sup>92</sup>

#### **4. The Permit Illegally Backslides from the 1992 Permit.**

The Region and GSP incorrectly argue that removing the narrative thermal plume limitations from the 1992 Permit, and EPA’s attempt to narrow the prohibition on WQS violations, are not illegal backsliding prohibited by the CWA.<sup>93</sup>

First, the Region argues that CWA § 402(o)’s anti-backsliding prohibition does not apply to the limitations which, EPA argues, were “based on CWA § 316(a),”

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<sup>90</sup> EPA does not cite any decisional authority interpreting NH Rev. Stat. Ann. § 485-A:8 (VIII), which appears to have not to have ever been interpreted by a court or the EAB.

<sup>91</sup> NH Rev. Stat. Ann. § 485-A:8 (VIII).

<sup>92</sup> NHDES filed an amicus brief out of concern that an argument in this appeal may be viewed as “a collateral attack on the NHDES findings.” NHDES Amicus at 3. While there is no such “collateral attack,” it should be noted that NHDES did not—in its § 401 certification or its amicus brief—state that the Permit does not require GSP to comply with NH WQS as codified in the state statutes and regulations.

<sup>93</sup> EPA Resp. at 45–49, 51; GSP Resp. at 45–50, 51.

rather than on state WQS under § 301(b)(1)(C).<sup>94</sup> But elsewhere in its response, EPA contradicts itself and admits that “these narrative provisions were derived from narrative water quality criteria and mixing zone elements in NH’s WQS.”<sup>95</sup> Indeed, as discussed in the Petition, 1992 Permit’s Fact Sheet likewise acknowledged that the thermal plume limitations were imposed to satisfy NH WQS:

[T]he proposed draft permit effluent limitations and special conditions imposed relative to the thermal component . . . assure satisfaction of the New Hampshire Water Quality Standards for the Merrimack River.<sup>96</sup>

GSP’s argument that this does not refer to the thermal plume limitations<sup>97</sup> is wrong because the limits explicitly restricting the thermal plumes were obviously “imposed relative to the thermal component.”<sup>98</sup>

Second, the Region argues that the Permit does not trigger § 402(o)(1) because the new thermal limits are not less stringent than the 1992 Permit’s.<sup>99</sup> However, in the absence of the explicit, categorical prohibitions on thermal plumes that block the zone of fish passage, contact the shorelines more than minimally, or change the BIP, the Permit is necessarily less stringent than the 1992 Permit,

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<sup>94</sup> EPA Resp. at 46.

<sup>95</sup> *Id.* at 43 (citing N.H. Code R. Env-Wq 1707.02, 1703.01(c) and 2011 Determinations at 174–78, 187).

<sup>96</sup> Att. 5 (AR-112) at 10.

<sup>97</sup> GSP Resp. at 49.

<sup>98</sup> *See* 1992 Permit, § I.A.g (thermal plume limitations).

<sup>99</sup> EPA Resp. at 46–47.



despite the addition of numeric in-stream temperature limits purportedly designed to *reduce but not eliminate* such events.

Importantly, numeric limitations are not necessarily more stringent than narrative limitations. For example, the standard narrative limitations requiring discharges to be “free from toxics in toxic amounts” or “free of objectionable color, odor, taste, and turbidity” may be more or less stringent than numeric limits on pollutants causing those conditions, depending on the levels at which they are set, the sensitivity of receiving waters, and other factors. Indeed, here the Permit contains many narrative limitations preventing discharges from causing certain detrimental effects (*e.g.*, turbidity, harmful toxic or chemical concentrations in wildlife, interference with recreational uses)<sup>100</sup> *as well as* numeric limits on total suspended solids, iron, copper, pH, and other parameters.<sup>101</sup> Neither of these two kinds of limits are more stringent than the other; they are cumulative, and removing either would result in a less stringent permit.

Third, the Region argues that § 402(o)(2) backsliding exceptions apply.<sup>102</sup> However, as discussed in the Petition, even where an exception applies, § 402(o)(3)’s “safety clause” flatly prohibits the renewal of a permit “to contain a less stringent effluent limitation if the implementation of such limitation would result in a

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<sup>100</sup> Permit, §§ I.A.13–17.

<sup>101</sup> *Id.*, §§ I.A.4–5.

<sup>102</sup> EPA Resp. at 47–49.

violation of a water quality standard.”<sup>103</sup> In light of this, the Region makes a final argument that the Permit’s limits, in the absence of the narrative limitations, “do not cause violations of NH WQS.”<sup>104</sup> This, too, is incorrect and conflicts with EPA’s own statements that it is granting a variance from WQS and not requiring the Station to comply with WQS.

**5. EPA’s Vague Extrinsic Statements Do Not Change the Plain Meaning of the Permit’s Standard Prohibition Against Violations of Water Quality Standards.**

The Permit states at Part I.A.12: “Discharges . . . shall not cause a violation of the water quality standards of the receiving water.” This standard prohibition was continued from the 1992 Permit, appears in many other NPDES permits for power plants<sup>105</sup> and other facilities,<sup>106</sup> and has been recognized by the courts as an important mechanism for achieving the goals of the CWA.<sup>107</sup> To change the meaning of this standard prohibition, EPA would have had to make clear within the Permit itself specifically which WQS apply and which do not (and, if EPA did so, the

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<sup>103</sup> Pet. at 60–62; 33 U.S.C. § 1342(o)(3).

<sup>104</sup> EPA Resp. at 49.

<sup>105</sup> RTC II-330.

<sup>106</sup> See, e.g., Permit No. NH0100099, Town of Hanover, NH, Part I.A.2, <https://www3.epa.gov/region1/npdes/permits/2015/finalnh0100099permit.pdf>

<sup>107</sup> See, e.g., *PUD No. 1 of Jefferson Cty. v. Wash. Dep’t of Ecology*, 511 U.S. 700, 716 (1994) (explaining that the CWA “permits enforcement of broad, narrative criteria”); *Nw. Env’tl. Advocates v. City of Portland*, 56 F.3d 979, 985–90 (9th Cir. 1995) (holding that prohibitions on WQS violations on NPDES permits are enforceable); *Ohio Valley Environmental Coalition v. Fola Coal Company, LLC*, 845 F.3d 133, 144 (4th Cir. 2017) (same).

Permit would be necessarily less stringent and allow violations of WQS). EPA states blithely that it is “appropriate for Region 1 to explain the scope of a permit term in a response to a comment,”<sup>108</sup> yet entirely fails to respond to the extensive authority holding that extrinsic statements outside the four corners of a permit do not alter the plain meaning of unambiguous permit terms.<sup>109</sup>

Furthermore, if they could be read to alter the Permit itself, EPA’s RTC statements purporting to limit Part I.A.12 to WQS “other than thermal”<sup>110</sup> would render that provision vague and confusing because some of the WQS refer to temperature and others refer to aspects of water quality affected by heat and other parameters.<sup>111</sup> While EPA offers the pretextual explanation for removal of the narrative thermal plume limitations—*i.e.*, that they might be “confusing,” which is obviously not true given the extremely common practice discussed above of including both numeric and narrative limitations for the same parameters—the Region attempts to add confusion to what is otherwise a straightforward and standard prohibition on WQS violations.

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<sup>108</sup> EPA Resp. at 52.

<sup>109</sup> *See* Pet. at 65–67.

<sup>110</sup> RTC II-307.

<sup>111</sup> *See* Pet. at 67 n.243.

**6. The Permit Presents Important Policy Considerations that the Board Should Review.**

Review by the EAB is appropriate not only to correct clear error, but also where a permit involves the exercise of discretion or important policy considerations that the Board should, in its discretion, review.<sup>112</sup> While GSP claims that the Permit is the “only reasonable and defensible conclusion that EPA could have reached,”<sup>113</sup> this is plainly not so, and is not the position taken by the Region.

To begin with, EPA was not required to move on to Step 4 of the § 316(a) framework and develop its own variance-based limits after rejecting the applicant’s,<sup>114</sup> but chose to do so. Second, EPA has rarely, if ever, written a power plant NPDES permit like the Permit, which allows a discharger to opt out of temperature limits depending upon on the amount of electricity it generates. Third, EPA admits that it could have retained the thermal plume limitations, despite granting a § 316(a) variance and including numeric temperature limits, but chose not to.<sup>115</sup>

All of these choices, and others, resulted in a very different approach to the permitting of discharges of waste heat, not only when compared to the 2011 Draft

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<sup>112</sup> 40 C.F.R. § 124.19(a)(4) (2019). The recent amendments to aspects of § 124.19 do not apply to this appeal, which was filed before the effective date of those amendments.

<sup>113</sup> GSP Resp. at 2.

<sup>114</sup> See *In re Dominion Energy Brayton Point, LLC*, 12 E.A.D. 490, 500 (EAB 2006).

<sup>115</sup> RTC II-333 (“To be clear, . . . EPA could conclude that both numeric and narrative thermal discharge conditions are needed.”).

Permit, but also the NPDES permits Region 1 has issued previously for power plants in New England. For example, the prior (1990) NPDES permit for the Schiller Station on the Piscataqua River in Portsmouth, New Hampshire, includes exactly the same three thermal plume effluent limitations, verbatim, that are in Merrimack's 1992 Permit, and the renewal permit for Schiller Station (2018) retains all three thermal plume limitations plus adds a fourth one ("thermal plumes from the station shall . . . not interfere with spawning of indigenous populations").<sup>116</sup> For Schiller, unlike Merrimack, EPA retained and expanded the narrative thermal plume limitations despite granting a § 316(a) variance and including numeric temperature requirements.<sup>117</sup>

Likewise, the NPDES permit for the Newington power plant (also on the Piscataqua River) has the same three thermal plume limitations as Merrimack's 1992 Permit, plus the fourth one that EPA added at Schiller.<sup>118</sup> Similarly, in Massachusetts, EPA included those four thermal plume limitations in the NPDES permits for the Mirant Canal Station (on Cape Cod Canal), the Mystic Station (on the Mystic River), and the Pepperrell Power Plant (on the Nashua River).<sup>119</sup> The prohibition on violations of WQS is also standard in power plant permits, without

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<sup>116</sup> RTC II-329.

<sup>117</sup> See <https://www3.epa.gov/region1/npdes/permits/2018/finalnh0001473permit.pdf>.

<sup>118</sup> RTC II-329.

<sup>119</sup> *Id.*

the purported narrowing to non-thermal WQS that the Region attempted here.<sup>120</sup>

For Merrimack, the Region now seeks to implement a novel and perhaps unique approach to power plant permitting—using electric-capacity limits to exempt the plant from in-stream temperature limits (measured only downstream of the discharge point), while removing the other water-quality-based limitations on the thermal discharges and resulting plumes—all based on the unsupported proposition that fish populations *may* be recovering as a result of recent plant operations, even though the plant continues to operate during “impactful” times of year and the frequency of its dispatch could increase at any time. Whether this marks the beginning of a new permitting trend for the Region or is just an aberration, the Permit’s approach involves a host of discretionary decisions and important policy considerations that the Board should, in its discretion, review under § 124.19(a)(4)(B).

**B. The Region Is Required to Set More Stringent BAT Limits for Combustion Residual Leachate.**

The Region is now attempting to walk away from its own rationale for declining to set more stringent case-by-case BAT limits on the Station’s discharges of combustion residual leachate through Outfall 003A. In its Response to Comments, the Region expressly acknowledged that, because the Fifth Circuit Court of Appeals in 2019 vacated the applicable provisions of ELGs setting BAT limits for leachate, “the Region must determine what limit(s) apply and are

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<sup>120</sup> *Id.* II-330.

appropriate to regulate this wastestream.”<sup>121</sup> CWA § 301 allows no room for discretion: the statute directs that the Region “shall require application of [BAT]” to the Station’s discharges.<sup>122</sup> EPA’s own regulations require that BAT limits “represent the minimum level of control that must be imposed” in a NPDES permit.<sup>123</sup> Here, because the BAT limits for leachate were vacated by the Fifth Circuit (and are thus “inapplicable”), the remaining “promulgated effluent limitations guidelines only apply to certain aspects of the discharger’s operation,” and the Region is required to set more stringent BAT limits for leachate on a case-by-case basis using BPJ.<sup>124</sup>

In attempting to argue its way around this legal deficiency in the Permit, the Region incorrectly describes its own reasoning.<sup>125</sup> In the Response to Comments, the Region expressly stated that it was making a case-by-case “determin[ation] of what limit(s) apply” to combustion residual leachate and found that the appropriate BAT requirements “are . . . no further control beyond BPT.”<sup>126</sup> The Region’s decision here can only be read as a case-by-case determination to set the 1982 BPT limits as BAT limits for leachate in this Permit, rather than setting more stringent

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<sup>121</sup> RTC V-30 (citing *Sw. Elec. Power Co. v. EPA*, 920 F.3d 999, 1033 (5th Cir. 2019)).

<sup>122</sup> 33 U.S.C. § 1311(b)(2)(A).

<sup>123</sup> 40 C.F.R. § 125.3(a).

<sup>124</sup> *Id.* § 125.3(c)(2)–(3).

<sup>125</sup> EPA Resp. at 52.

<sup>126</sup> RTC V-30.

BAT limits, its post-hoc statements to the contrary notwithstanding.

The Region does not even attempt to argue that the 1982 BPT limits would satisfy the more stringent BAT standard—nor could it, in light of the Fifth Circuit’s emphatic rejection of EPA’s 2015 attempt to establish those same limits as BAT for leachate on a nationwide basis.<sup>127</sup> As discussed in the Petition, the Fifth Circuit’s decision was based on EPA’s own findings that the 1982 BPT limits were outdated, inadequate, and ineffective at controlling pollution.<sup>128</sup> Noting that BAT limits are supposed to be based on state of the art, best-performing technologies, the Fifth Circuit observed that EPA’s attempt to pass off the 1982 BPT limits as meeting the BAT standard “was as if Apple unveiled the new iMac, and it was a Commodore 64.”<sup>129</sup>

The Region’s argument that the 1982 BPT standards remain “applicable” to the Station<sup>130</sup> misses the point. That the 1982 BPT standards remain applicable *as BPT standards* is not in dispute. The issue is whether the 1982 BPT standards—in the year 2020, and notwithstanding EPA’s own findings that they are outdated, inadequate, and ineffective—can lawfully be set as technology-forcing BAT

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<sup>127</sup> Pet. at 70–75 (citing *Sw. Elec. Power Co.*, 920 F.3d at 1003-04, 1007, 1015, 1017–19, 1025–26, 1030, 1033).

<sup>128</sup> *Id.* at 72–74 (citing 80 Fed. Reg. 67,838, 67,840, 67,851 (Nov. 3, 2015) and 78 Fed. Reg. 34,432, 34,459 (June 7, 2013)).

<sup>129</sup> *Sw. Elec. Power Co.*, 920 F.3d at 1004.

<sup>130</sup> EPA Resp. at 54.



standards.<sup>131</sup> CWA § 301 requires that EPA “shall” require BAT standards to be met by all dischargers.<sup>132</sup> EPA’s own regulations require the Region to set case-by-case limits under circumstances such as these, where ELGs establishing BAT limits do not apply.<sup>133</sup> And EPA itself has acknowledged since 2010 that case-by-case BAT limits are required for coal combustion wastewater that are more stringent than the 1982 BPT limits.<sup>134</sup>

In light of this regulatory history, the specious argument advanced by the Region and the Permittee that a 1982 decision not to set BAT limits for various “low-volume wastes” still “occupies the field” in 2020<sup>135</sup> is without merit. EPA proposed in 2013 that leachate must be regulated separately from other low-volume wastes because it is a significant power plant wastestream in its own right.<sup>136</sup> In fact, in finalizing updated ELGs in 2015, EPA found that, “[i]f leachate were a separate industry, it would rank as the 18th-largest source of water pollution in the

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<sup>131</sup> Pet. at 70–75.

<sup>132</sup> 33 U.S.C. § 1311(b)(2)(A).

<sup>133</sup> 40 C.F.R. § 125.3(a), (c)(2)–(3).

<sup>134</sup> Att. 21 (AR-1564; EPA Memorandum from James Hanlon, NPDES Permitting of Wastewater Discharges at Attachment A, June 7, 2010 (providing guidance regarding the existing statutory obligation to establish technology-based effluent limits for scrubber wastewater prior to the finalization of the 2015 ELGs for steam electric power plants)); *see also* 80 Fed. Reg. at 67,840, 67,851; 78 Fed. Reg. at 34,459.

<sup>135</sup> EPA Resp. at 5–6; GSP Resp. at 52–53.

<sup>136</sup> *See* 78 Fed. Reg. at 34,439–40 (noting that the proposed rule was based on a 2009 detailed study of power plant wastestreams).

United States” and that discharges of leachate “produce[] more toxic-weighted pound equivalents than the entire coal mining industry.”<sup>137</sup> Faced with EPA’s overwhelming record, the Fifth Circuit held that EPA’s failure to set more stringent BAT limits for leachate was inconsistent with Congress’ intent that BAT limits “reflect ‘a commitment of the maximum resources economically possible to the ultimate goal of eliminating all polluting discharges.’”<sup>138</sup> Similarly here, the Region cannot lawfully hide behind a 1982 decision not to set BAT limits for leachate, in light of the overwhelming record that EPA has built in recent years that more stringent BAT limits for leachate are necessary.

The Board’s recent decision in *In re Arizona Public Service Co.*,<sup>139</sup> does not require a different result. In that case, the Board held that EPA Region 9 “did not clearly err in concluding that relevant parts of the 1982 ELGs are now currently in effect given the Fifth Circuit’s vacatur of the corresponding parts of the 2015 ELGs.”<sup>140</sup> As discussed above, however, the fact that the 1982 BPT standards remain applicable to the Station *as BPT standards* is not in dispute. Here, because the Region made an unlawful and erroneous case-by-case determination that the 1982 BPT standards could satisfy the BAT requirements<sup>141</sup>—despite the Fifth

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<sup>137</sup> *Sw. Elec. Power Co.*, 920 F.3d at 1032.

<sup>138</sup> *Id.* at 1030 (quoting *EPA v. Nat’l Crushed Stone Ass’n*, 449 U.S. 64, 74 (1980)).

<sup>139</sup> 18 E.A.D. 245 (EAB 2020).

<sup>140</sup> *Id.* at 293.

<sup>141</sup> RTC V-30.

Circuit's recent decision to the contrary—the Board should remand the Permit to the Region and require it to satisfy its obligations to set more stringent BAT limits for leachate on a case-by-case basis pursuant to CWA § 301 and 40 C.F.R. § 125.3.<sup>142</sup>

### III.

#### CONCLUSION

For the foregoing reasons and those in the Petition, Petitioners respectfully request that the Board hear oral argument and review and remand the contested conditions, decisions, and determinations in NPDES Permit No. NH0001465.

Dated: November 9, 2020

Respectfully Submitted,

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<sup>142</sup> In *In re Arizona Public Service Co.*, the Board also found that EPA Region 9 did not err in declining to impose BAT-effluent limits on legacy bottom ash transport water in that permit because the permittee already had committed to eliminate bottom ash transport water discharges by 2023 to comply with the 2015 ELG rule. 18 E.A.D. at 296-97. In this case, by contrast, the Station has no plan to control combustion residual leachate discharges beyond the level required by the 1982 BPT standards. *In re Arizona Public Service Co.* is thus distinguishable from this case in a critical respect.

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**STATEMENT OF COMPLIANCE WITH WORD LIMITATION**

In accordance with 40 C.F.R §§ 124.19(d)(1)(iv) & (d)(3), I hereby certify that this brief does not exceed 9,000 words, the word limit established in the Board’s June 16, 2020 order. Not including the cover page, tables, signature block, statement of compliance with word limitation, and certificate of service, this brief contains 8,895 words (including footnotes), as counted by Microsoft Word. This brief is written in Century Schoolbook, 12-point font.

/s/ Reed W. Super  
Reed W. Super

**CERTIFICATE OF SERVICE**

I, Reed W Super, hereby certify that on November 9, 2020, I caused to be served a true and correct copy of the foregoing reply brief to the following by email and through the EAB’s e-filing system:

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