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

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ENVIR. APPEALS BOARD

In re:)
)
)

Dominion Energy Brayton Point, LLC)
(Formerly USGen New England, Inc.))
Brayton Point Station)
)

NPDES Permit No. MA-0003654)
)

NPDES Appeal No. 07-01

**AMICUS BRIEF OF THE
MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION
IN SUPPORT OF THE REMAND DETERMINATION ISSUED BY REGION 1
IN RELATION TO NPDES PERMIT NO. MA-0003654 FOR
BRAYTON POINT STATION**

For the reasons stated below, the Massachusetts Department of Environmental Protection (“MassDEP”) is filing this amicus brief with the Environmental Appeals Board (the “EAB”) in support of the Remand Determination issued by the Region 1 office (“Region 1” or “Region”) of the United States Environmental Protection Agency (“EPA”) on November 30, 2006 in relation to Region 1’s reissuance of National Pollution Elimination System (“NPDES”) Permit No. MA-0003654 for the Brayton Point Station (“BPS”) on October 6, 2003 (the “Permit”).

I. INTRODUCTION

On October 6, 2003, Region 1 and MassDEP reissued the joint Permit for BPS to USGen New England, Inc. (“USGen”), the owner of BPS at the time.¹ On November 5, 2003, USGen filed a Petition for Review of the federal NPDES permit with the EAB pursuant to 40 C.F.R. 124.19, NPDES Appeal No. 03-12. On February 19, 2004, the EAB granted review of the petition. *See* Order Granting Review, NPDES Appeal No. 03-12, slip op. at 5-11. The EAB’s Order Granting Review also granted amicus curiae status to the Commonwealth of Massachusetts and several other entities. *Id.* at 6-7. Oral argument in the matter was held on September 9, 2004. After considering all of the briefs filed, as well as the arguments presented at oral argument, the EAB issued a Remand Order on February 1, 2006, NPDES Appeal No. 03-12 (“Remand Order”), in which it concluded that, for the most part, Petitioner failed to demonstrate that the Region clearly erred in establishing the conditions of BPS’s Final Permit. *See* Remand Order, slip op. at 5. The EAB also found no issues involving either the Region’s exercise of discretion or an important policy consideration that warranted a change to the conditions of the Final Permit. *Id.* The EAB did find, however, that a remand was warranted with respect to the following two narrow substantive issues:²

¹ USGen New England, Inc. subsequently transferred ownership and title in Brayton Point Station to Dominion Energy Brayton Point, LLC. Throughout this Amicus Brief, the term “Petitioner” will refer to Dominion Energy Brayton Point, LLC and its predecessor in interest, USGen New England, LLC.

² The EAB’s Remand Order also directed Region 1 to amend the permit to fix a typographical error regarding the expression of total iron limits in the permit (*See* Remand Order, slip op. at 291 – 292, Part VI.D, for the discussion of this issue) and to place in the record its consultant’s production foregone re-analysis (*See* Remand Order, slip op. at 267 – 268, Part VI.B.4.b.iii.c(5), for the discussion of this issue).

1. *Revised Noise Impact Analysis (“NIA”) Used in Determining the Best Technology Available (BTA) Under Section 316(b)*. The EAB directed Region 1 to supplement its response to comments with a rationale that addresses the concerns raised by Petitioner on appeal regarding the NIA or to modify the permit requirements, as appropriate. *See* Remand Order, slip op. at 283 – 288, Part VI.C.3.c, for the discussion of this issue.
2. *Five Day Exceedance Value Used to Derive Thermal Effluent Limits Under Section 316(a)*. The EAB directed Region 1 to provide a rational explanation for its selection of five days as the critical temperature exceedance threshold value. The EAB stated that as an alternative Region may decide to modify this value. If the Region did so, it must provide a sufficient explanation for the new value. *See* Remand Order, slip op. at 133 – 135, Part VI.A.3.b.ii.d, for the discussion of this issue.

Following the EAB’s issuance of the Remand Order, Region 1 consulted closely with MassDEP, primarily on the noise issue, in Region 1’s development of its Remand Determination dated November 30, 2006 (“Remand Determination”). Region 1’s Remand Determination supplements the administrative record supporting the Permit by providing complete and rational responses to the two substantive remand issues identified by the EAB: (1) whether the entire facility’s noise, including the noise generated by the cooling towers and the new pollution control equipment, will likely violate Massachusetts noise regulations, and (2) the basis for the 5-day temperature exceedance value. On both of these remand issues, Region 1 reaffirmed its earlier decisions and determined that no changes to the Permit’s limits were necessary or appropriate. On January 3, 2007,

Petitioner filed a Petition for Review (the “Petition”) of the Remand Determination with the EAB. As discussed in more detail below, MassDEP concurs with the Remand Determination and therefore requests that the EAB affirm the Permit in its entirety.

II. ARGUMENT

A. The EAB Should Affirm Region 1’s Section 316(b) BTA Determination In The Permit Because Region 1 Has Clearly Explained And Supported Its Conclusion In The Remand Determination That BPS Can Be Converted To Close-Cycle Cooling While Likely Complying With Massachusetts’ Noise Regulations.

The EAB remanded the NIA issue because it found the record lacked sufficient information to indicate whether or not BPS, if converted to closed-cycle cooling, will likely violate Massachusetts’ noise regulations. *See* Remand Order, slip op. at 287. The EAB noted that, although Region 1 had its consultant, Hatch, Inc. (“Hatch”), perform a detailed analysis of ambient sound levels for the final permit, there was no indication in the NIA that Massachusetts considered Hatch’s analysis and concurred in its entirety, and there was no documentation in the administrative record that would suggest that Massachusetts specifically analyzed or addressed Hatch’s conclusions. *See* Remand Order, slip op. at 286 n. 345.

As discussed below, Region 1’s Remand Determination and the related concurrence letter from MassDEP provide the supplemental rationale and clarification requested by the EAB by documenting that the projected noise from the entire BPS facility after conversion to closed-cycle cooling, including the noise generated by the cooling towers and the new pollution control equipment, will likely comply with MassDEP’s noise regulations.

Following the EAB's issuance of the Remand Order, Region 1 consulted with MassDEP on the noise issue and requested our review of the Hatch *Addendum to the Noise Impact Assessment* as well as the Remand Determination. The Remand Determination's analysis of this issue discusses in detail the application of Massachusetts' noise control requirements, including MassDEP noise regulations, policies, and practices, particularly as they relate to an existing facility such as BPS. *See* Remand Determination, pp.46-56. In its letter to Region 1 dated November 29, 2006, MassDEP affirmed that: (1) the Remand Determination and the Hatch *Addendum to the Noise Impact Assessment* accurately describe how MassDEP applies its noise regulations to BPS as an existing facility, and (2) MassDEP concurs with Region 1's conclusion that BPS can be converted to closed-cycle cooling while likely complying with MassDEP's noise regulations. A copy of MassDEP's concurrence letter is attached hereto as Exhibit A. Accordingly, any ambiguity in the administrative record about the basis for Region 1's NIA and its related BTA conclusion has been addressed on remand, and the conclusion reached by Region 1 is well supported by the Remand Determination and expressly concurred in by MassDEP.

Moreover, the Petition does not dispute Region 1's characterization of how MassDEP applies its noise regulations to BPS or Region 1's conclusion that BPS can be converted to closed-cycle cooling while likely complying with MassDEP's noise regulations. Instead, Petitioner's challenge to the Hatch Addendum is limited to a claim that it "does not show likely compliance with *EPA's* own regulatory guidance for noise." (Emphasis added). *See* Petition, p.16. This purported "regulatory guidance" is actually an informational document entitled, *Information on Levels of Environmental Noise*

Requisite to Protect Public Health and Welfare With An Adequate Margin of Safety (the “Levels Document”) (AR 4001), that was prepared by EPA’s former Office of Noise Abatement and Control in 1974 when EPA still maintained primary federal responsibility for noise source emission control under the federal Noise Control Act of 1972, 42 U.S.C. 4901 to 4918.³ The Levels Document states clearly on its face that the levels identified therein do not constitute standards, specifications or regulations, or even recommended noise levels.⁴ See Levels Document at cover page and pp. Forward-2, 4 and 7.

Regardless, the question whether BPS will likely comply with this 1974 informational document was not remanded by the EAB to Region 1 for further review. In addition, as the Remand Determination points out, Petitioner did not raise any issues related to this

³ Prior to 1981, the Environmental Protection Agency (EPA) coordinated all federal noise control activities through its Office of Noise Abatement and Control. In 1981, however, the Reagan Administration concluded that noise issues were best handled at the state or local government level. As a result, EPA phased out the office’s funding in 1982 as part of a shift in federal noise control policy to transfer primary responsibility for regulating noise to state and local governments. See <http://www.epa.gov/history/topics/noise/>. See also EPA Public Access Webpage, which includes the following Question/Answer ID 1765:

Question: “Does the EPA regulate noise?”

EPA Answer: “EPA does *not* have any regulatory authority governing noise in local communities. You should consult with your local governmental (e.g., city and county) authorities to see if there are local or state laws that might apply to your situation. In addition, many states run noise pollution programs.” (Emphasis added).

http://publicaccess.custhelp.com/cgi-bin/publicaccess.cfg/php/enduser/std_adp.php?p_faqid=1765 (updated January 03, 2007).

⁴ The information presented in the Levels Document was based on the state of scientific knowledge of noise in 1974. *Id.* at p. Forward-1. Although EPA’s Office of Noise Abatement and Control intended to revise the Levels Document as knowledge about noise is “expanded, improved and refined,” MassDEP notes that no revisions have been made to this document over the past 30+ years to reflect gains made in the science of noise. *Id.* at p. Forward-2.

document on appeal. *See* Remand Determination at p. 56. Because the Petition does not dispute Region 1's characterization of how MassDEP applies its noise regulations to BPS or Region 1's conclusion that BPS can be converted to closed-cycle cooling while likely complying with MassDEP's noise regulations, and Petitioner's claim is clearly outside of the scope of the noise issue identified in the Remand Order, it warrants no consideration by the EAB.

Apart from it being beyond the scope of the Remand Order, there is no merit to Petitioner's apparent claim that this EPA noise information document is determinative of whether closed-cycle cooling is BTA for BPS. As Region 1 emphasized in the Remand Determination, "there are no federal noise laws or regulations governing the acceptability of sound emissions from cooling towers at BPS." *See* Remand Determination, p. 56. Region 1 took pains to highlight that in the noise document itself, "EPA stated clearly and repeatedly in the document that the identified noise levels should not be regarded or used as federal noise standards or regulations." *Id.* Region 1 underscored this point by quoting a section of the document that states that "[t]he general purpose of this document is rather to discuss environmental noise levels requisite for the protection of public health and welfare without consideration of those elements necessary to an actual rule-making." *Id.* "Instead," the document states, "the levels identified here will provide State and local governments as well as the Federal Government and the private sector with an *informational point of departure* for the purpose of decision-making." (Emphasis added). *Id.*

In short, a plain reading of the EPA noise document itself makes clear that a State's noise regulations ultimately govern the type of NIA issue remanded by the EAB

in the instant case. In MassDEP's experience, while the noise levels identified in the 1974 EPA document have, on occasion, been identified by noise consultants in a permitting context, they are not normally considered by MassDEP in determining compliance with its noise regulations.

In summary, BPS's likely compliance with an EPA noise level information document was not an issue remanded by the EAB for further review by Region 1 and, therefore, Petitioner's challenge to Hatch's reference to this document should not be given any consideration by the EAB. Furthermore, the noise levels identified in the above document are informational in nature and are not required to be used by MassDEP in determining BPS's likely compliance with Massachusetts noise regulations. Thus, this EPA information document is not determinative or relevant to the remand issue of whether BPS's conversion to closed-cycle cooling is likely to violate *Massachusetts'* noise standards.

Accordingly, because Region 1 has clearly explained and supported its conclusion in the Remand Determination that BPS can be converted to closed-cycle cooling while likely complying with Massachusetts' noise regulations, the EAB should affirm Region 1's section 316(b) BTA determination in the Permit.

B. The EAB Should Affirm Region 1's Selection Of The Critical Temperature Exceedance Threshold of Five-Days Because Region 1's Explanation And Basis For This Technical Determination Is Clearly Rational In Light Of All Of The Information In the Record And Is, Therefore, Entitled To Deference By The EAB.

The Remand Determination contains a detailed discussion of the basis for Region 1's selection of a critical temperature exceedance threshold of five days. See Remand Determination, pp. 21-29. This determination describes the reasoning behind setting the minimum and maximum number of exceedance days under consideration, and it

identifies the factors used in choosing a value between three and seven days and in ultimately selecting five days as the critical temperature exceedance threshold. Region 1 explained that this value falls in the middle of the narrow range of values that remained for consideration following Region 1's scientific analysis, and is consistent with Region 1's approach of selecting reasonably conservative values throughout its section 316(a) variance analysis. *Id.*, at p. 29.

The Remand Determination on this issue is entitled to deference by the EAB. As the EAB made clear in its Remand Order, it assigns a particularly heavy burden to Petitioner when an appeal is based on issues that are fundamentally technical in nature. *See* Remand Order, slip op. at 27, Part IV. Where the views of the Region and Petitioner indicate bona fide differences of expert opinion or judgment on a technical issue, the EAB will typically defer to the Region. *Id.*, at 28. In such cases, the EAB will determine whether the record demonstrates that the Region duly considered the issues raised in public comments and whether the approach ultimately adopted by the Region is rational in light of all of the information in the record. *Id.*, at 28. The Remand Determination evidences Region 1's consideration of the issues raised by Petitioner and others regarding the basis for the critical temperature exceedance threshold and sets forth a rational basis for Region 1's selection of the five-day value. Accordingly, Region 1 has clearly met the standard for deference by the EAB and it should affirm the five-day value component of the Permit.

Petitioner highlights the fact that a five-day exceedance threshold value was used in MassDEP's *Thermal Discharge Mixing Zone Recommendation, dated July 15, 2002* (AR 192, Appendix A) (the "mixing zone analysis"). Petitioner further contends that

Region 1 had no basis other than the mixing zone analysis for its selection of the five-day value under a section 316(a) variance analysis. The Remand Determination, however, addresses and refutes Petitioner's claim. Region 1 explained that although the Permit is based on a section 316(a) variance, rather than on the state water quality standards themselves, it also took note of the fact that its selection of a five-day value was generally consistent with the five-day maximum value used in the mixing zone analysis. *See* Remand Determination, p.26, footnote 25. In short, Region 1 regarded the basic concordance between the Region and MassDEP on the five-day value as further evidence that the value was both adequately protective and reasonable. *Id.*

MassDEP concurs with the explanation in the Remand Determination regarding the relevance of mixing zone analysis to Region 1's selection of the five-day value for the purposes of its section 316(a) variance analysis. Moreover, MassDEP previously responded to Petitioner's broader claim that the mixing zone analysis was the basis for the thermal discharge limits in Permit. *See* Section II.C. (pp. 13 –15) of MassDEP's Supplemental Amicus Brief, dated June 29, 2004, in NPDES Appeal No. 03-12. The key points made by MassDEP in response to this contention warrant reiteration below.

MassDEP's 2002 Thermal Discharge Mixing Zone Recommendation contains a water quality-based analysis performed under 314 C.M.R. 4.03(2) that takes into consideration MassDEP's mixing zone policy.⁵ A "mixing zone" analysis is distinct from a variance-based analysis performed under section 316(a) of the Federal Clean

⁵ 314 C.M.R. 4.03(2) expressly authorizes MassDEP, in developing water quality-based effluent limits, to recognize a limited area or volume of a water body as a mixing zone for the initial dilution of a discharge. Waters within a mixing zone may deviate from the numeric water quality criteria only if the mixing zone complies with the conditions specified in 314 C.M.R. 4.03(2), including an adequate "zone of passage" for swimming and drifting aquatic organisms.

Water Act. The mixing zone and section 316(a) variance are governed by substantively different legal standards. Under 314 C.M.R. 4.03(2), a mixing zone must be established to satisfy Massachusetts water quality standards while a section 316(a) variance must “assure the protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife” in the receiving water (i.e. the more flexible “BIP” standard).

MassDEP’s Thermal Discharge Mixing Zone Recommendation would have imposed much more stringent limits on BPS than those set forth in the section 316(a) variance and resulted in significant operational impacts on BPS. For instance, MassDEP’s Thermal Discharge Mixing Zone Recommendation would allow *no* thermal discharge at BPS at certain times of the year to ensure an adequate zone of passage for migrating fish and require BPS to curtail its operations, accordingly. *See* EPA’s Response to Comments, dated October 3, 2003, for Draft NPDES Permit No. MA 0003654, p. V-10.

MassDEP and Region 1 ultimately agreed with Petitioner that a water quality-based mixing zone would be more stringent than is necessary to meet the BIP standard under a section 316(a) variance. Region 1, therefore, established variance-based limits independently of the state water quality-based standards and mixing zone policy for the Final Permit.⁶

In summary, contrary to Petitioner’s claim, the Remand Determination identifies the basis and the more specific factors for Region 1’s ultimate selection of the five-day value, independent of MassDEP’s mixing zone analysis. *See*, in particular, the Remand

⁶ MassDEP’s Water Quality Certification documents its concurrence with EPA’s establishment of the section 316(a) variance based thermal discharge limits in the Final Permit.

Determination at p.29. Region 1's explanation and basis for this technical determination is clearly rational in light of all of the information in the record and is entitled to deference by the EAB.

III. CONCLUSION

For the reasons stated in the Argument section above, MassDEP believes that Region 1 appropriately addressed the issues regarding the NIA and the five-day value in its Remand Determination, as requested by the EAB. MassDEP concurs with Region 1's analyses and conclusions on both of these issues. On the noise issue, the Petition does not challenge Region 1's response to the actual question asked by the EAB. Indeed, Petitioner takes no issue with Region 1's characterization of Massachusetts noise regulations or its conclusion that BPS can be converted to closed-cycle cooling while likely complying with Massachusetts noise regulations. Instead, Petitioner's sole contention is based on an incorrect assumption about the regulatory significance of a 1974 EPA noise levels information document that is outside the scope of the Remand Order. As the Remand Determination and EPA's information document make clear, the noise levels identified in the latter should not be regarded or used as federal noise standards, specifications or regulations, or even recommended noise levels.

Consequently, Petitioner's argument about BPS's likely compliance with these informational noise levels is not determinative or even relevant to the specific noise issue remanded by the EAB (i.e. whether BPS can be converted to closed-cycle cooling while likely complying with *Massachusetts'* noise regulations). On the issue of the basis for the five-day temperature exceedance value, Petitioner has clearly failed to meet its heavy burden of demonstrating why the EAB should not defer to Region 1's judgment on this

technical matter. The record amply demonstrates that Region 1 duly considered the issues raised by Petitioner and others during the comment period and ultimately adopted a value that is rational in light of all of the information in the record.

Region 1 and MassDEP reissued their joint NPDES permit for BPS in October 2003, over three and one-half years ago. In the interim, BPS continues to operate under the terms of the joint NPDES permit first issued in 1993, meaning that the longstanding and substantial adverse ecological impacts of BPS on Mount Hope Bay documented in the administrative record for this Permit continue unabated. For the reasons stated here and in the Determination Remand, MassDEP requests that the EAB deny review of the Petition for failure of Petitioner to meet its burden under 40 C.F.R. 124.19(a) and affirm the validity of the remaining Permit conditions at issue. This will allow the Permit to go into effect and commence the long-awaited step of requiring BPS to effectively address its detrimental effects on Mount Hope Bay.

Respectfully submitted,

Massachusetts Department of Environmental Protection
By its attorney:



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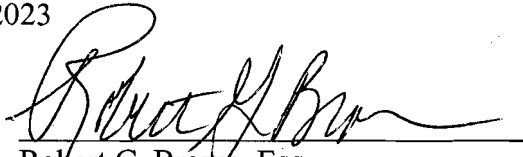
Date: March 2, 2007

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing Motion of the Massachusetts Department of Environmental Protection for Leave to File Amicus Brief in Support of EPA NPDES Permit No. MA-0003654 in the matter of Dominion Energy Brayton Point, LLC (Formerly USGen New England, Inc.) Brayton Point Station, NPDES Appeal No. 07-01, were served by United States First Class Mail on the following persons this second day of March, 2007:

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EXHIBIT A



COMMONWEALTH OF MASSACHUSETTS
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ARLEEN O'DONNELL
Commissioner

COPY

November 29, 2006

Linda M. Murphy, Director, Office of Ecosystem Protection
United States Environmental Protection Agency Region 1
1 Congress Street, Suite 1100
Boston, Massachusetts 02114-2023

- Re: Dominion Energy Brayton Point, LLC (Formerly USGen New England, Inc.)
Brayton Point Station, NPDES Permit No. MA0003654

Dear Ms. Murphy:

In its February 1, 2006 Remand Order the Environmental Appeals Board (the "EAB") directed EPA Region 1 ("EPA") to provide further clarification regarding the Noise Impact Analysis ("NIA") supporting the above referenced Permit for Brayton Point Station ("BPS") and its consistency with Massachusetts noise regulations. Following the remand, EPA consulted with MassDEP and requested our review of the documents referenced below.

MassDEP has reviewed the final *Addendum to Noise Impact Assessment*, prepared by Hatch, Inc., dated November 20, 2006 ("the Addendum"), and EPA's related proposed final *Determination on Remand from the EPA Environmental Appeals Board (Brayton Point Station NPDES Permit No. MA0003654)*, dated, November 29, 2006 (the "Remand Determination"), which includes a more detailed explanation of MassDEP's application of its noise regulations at 310 CMR 7.10. Based on our review of these documents, MassDEP hereby affirms that (1) the Remand Determination and the Addendum accurately describe how MassDEP's applies its noise regulations to BPS as an existing facility, and (2) MassDEP concurs with EPA's supplemental NIA, as described in the Addendum and Remand Determination, that conclude that BPS can be converted to closed-cycle cooling while likely complying with MassDEP's noise regulations.

As noted in the Remand Determination, Dominion Energy will be required to obtain written approval from MassDEP prior to installing cooling towers at BPS. To obtain such approval, Dominion Energy will need to complete and submit an application for a plan approval pursuant to 310 CMR 7.02. To date, MassDEP has not received any such application from

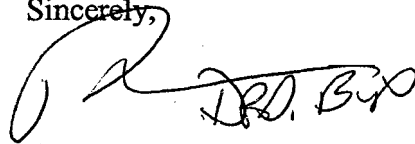
This information is available in alternate format. Call Donald M. Gomes, ADA Coordinator at 617-556-1057. TDD Service - 1-800-298-2207.

MassDEP on the World Wide Web: <http://www.mass.gov/dep>

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Dominion Energy for review. Therefore, nothing in this letter should be construed to mean that MassDEP has prejudged any design plan or plan approval application that may be submitted by Dominion Energy for the installation of cooling towers at BPS. Finally, if MassDEP does ultimately approve the installation of cooling towers at BPS, follow-up monitoring will be required to ensure that sound levels are acceptable and to determine whether additional mitigation may be needed.

Sincerely,

A handwritten signature in black ink, appearing to read "D. Johnston", is written over a large, stylized circular flourish.

David Johnston
Deputy Regional Director
Southeast Regional Office

cc: Mark Stein, U.S. EPA Region 1
Philip Weinberg, MassDEP/Boston
Richard Lehan, MassDEP/Boston
Douglas Shallcross, MassDEP/Boston
Robert Brown, MassDEP/Boston
John Winkler, MassDEP/SERO