# **EPA - New England**

# Clean Water Act NPDES Permitting Determinations for Thermal Discharge and Cooling Water Intake from Brayton Point Station in Somerset, MA

(NPDES Permit No. MA 0003654)

Date: July 22, 2002

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  - and NEP

### 1.0 Introduction

This document presents EPA-New England's (EPA) determinations regarding thermal discharges and cooling water intake requirements for the new Draft National Pollutant Discharge Elimination System (NPDES) permit (No. MA 0003654) being developed under the Clean Water Act, 33 U.S.C. §§ 1251 et seq. (CWA), for the Brayton Point Station power plant in Somerset, Massachusetts (BPS). BPS is currently owned and operated by US Gen New England, Inc. (referred to herein as either USGenNE, the permittee, the applicant, or the company), which is owned by, or otherwise affiliated with, Pacific Gas & Electric (PG&E) - National Energy Group and PG&E Corporation.<sup>1</sup>

This document constitutes an important part of the administrative record supporting the new Draft NPDES permit for BPS and it is incorporated by reference in the permit's Fact Sheet. Furthermore, its key determinations are described in the Fact Sheet. Other necessary determinations to support the new NPDES permit for BPS (<u>i.e.</u>, issues not related to thermal discharge and cooling water intake, such as effluent limitations for metals) are discussed in the Fact Sheet and other supporting materials in the administrative record but not in this document. Because the determinations presented in this document are being developed to support a draft permit and EPA and MA DEP will be soliciting public comment on the draft permit, these determinations are subject to potential revision based on the comments received if the permitting agencies conclude that changes are warranted.

Thermal discharge limitations may be governed either by technology-based, water quality-based or CWA § 316(a) variance-based requirements, whereas cooling water intake requirements are governed by CWA § 316(b), 33 U.S.C. § 1326(b). Each of these potential sources of permit requirements is addressed in a separate determination section herein. In some cases, this document incorporates by reference analyses from other documents. For example, water quality analyses by the Commonwealth of Massachusetts are incorporated by reference. All of the documents incorporated by reference are included herein as appendixes or found in the administrative record.

<sup>&</sup>lt;sup>1</sup> It is EPA's understanding that USGen New England, Inc., is owned by, or otherwise affiliated with, PG&E/NEG, but that USGenNE is the permittee. Both corporate names have been included on materials submitted by the permittee to EPA in support of the BPS permit, and officials from both entities have met with EPA to present the permittee's views. The permittee has also written that neither USGenNE nor PG&E/NEG is the same company as the Pacific Gas & Electric Company, the California utility, though all are corporate affiliates of PG&E Corporation. See PG&E Corporation Press Release (March 5, 2002).

EPA is developing this permit to meet the requirements of the Clean Water Act and other pertinent statutes. Viewed in larger context, however, EPA sees development of this permit to control Brayton Point Station's impact on Mount Hope Bay as an important part of broader public and private efforts to restore and maintain the health of the Mount Hope Bay and greater Narragansett Bay ecosystem. These efforts include projects to improve sewage treatment and abate combined sewer overflows from Fall River, fishery management steps (including fishing restrictions) in both the Massachusetts and Rhode Island portions of Mount Hope Bay to allow the recovery of a sustainable fishery, and other projects. Since Brayton Point Station is the largest industrial discharger impacting the habitat and fishery of Mount Hope Bay, placing appropriate controls on the power plant's operations can make a critical contribution to this larger effort and this can be done while allowing the plant to continue as a major source of electrical power for New England.

While EPA has independently drawn the conclusions presented in this document, EPA consulted closely with a number of agencies from the Commonwealth of Massachusetts, the State of Rhode Island and the Federal Government in carrying out the analyses discussed herein. Such consultation was essential because, along with EPA, these other agencies also have relevant substantive expertise and regulatory responsibilities related to development and issuance of the permit, as well as public responsibility for ensuring protection of the natural resources of the Mount Hope Bay ecosystem.

Specifically, EPA consulted with the Massachusetts Department of Environmental Protection (MA DEP) because MA DEP co-issues the NPDES permit with EPA, has substantive expertise in a number of relevant areas (e.g., water quality, engineering, fisheries), and must determine what permit requirements are needed to satisfy the Commonwealth's Water Quality Standards and any other requirements of State law. See 33 U.S.C. § 1341(a)(1) and (d). EPA also consulted with the Massachusetts Division of Fisheries and Wildlife which has responsibilities and expertise related to Massachusetts fisheries, and the Massachusetts Office of Coastal Zone Management (MA CZM) which has substantive expertise and must certify that the permitted discharge will be consistent with the Commonwealth's coastal zone management plan. See 40 C.F.R. § 122.49(d).

Further, EPA also consulted closely with the Rhode Island Department of Environmental Management (RI DEM) in developing the draft permit for BPS. EPA must ensure that the discharges it permits do not cause violations of a downstream state's water quality standards. See 33 U.S.C. § 1341(a)(2). Although BPS initially makes thermal discharges to, and withdraws cooling water from, Massachusetts waters, these discharges and withdrawals could also interfere with attainment of water quality standards in Rhode Island waters. Since RI DEM is responsible for the interpretation and application of Rhode Island's Water Quality Standards, EPA needed to consult with RI DEM on water quality matters. In addition, RI DEM's Division of Marine Fisheries has responsibilities and expertise related to Rhode Island fisheries and RI DEM also has substantive expertise in several other areas (e.g., engineering, water quality). Rhode Island's

Coastal Zone Management agency will also be asked to certify that the permitted discharge will be consistent with Rhode Island's coastal zone management plan. <u>See</u> 40 C.F.R. § 122.49(d).

Finally, EPA also consulted with the National Marine Fisheries Service (NMFS) and the U.S. Fish & Wildlife Service (F&WS) because these agencies have obvious substantive expertise on fisheries issues. In addition, EPA is directed by 40 C.F.R. § 125.72(d) to consult with these agencies when considering an application for a variance under CWA § 316(a). Moreover, NMFS has regulatory responsibility for applying the Essential Fish Habitat requirements of the Sustainable Fisheries Act and NMFS and the F&WS share responsibility for applying the requirements of the Endangered Species Act. See 40 C.F.R. §§ 124.59(b) and (c) and 122.49(d); 16 U.S.C. §§ 1801 et seq.

EPA and the other state and federal agencies have also consulted extensively with the permittee on the issues discussed in this document and have carefully considered the data and analysis presented by the permittee both in writing and at numerous meetings. The company has brought information to bear on a variety of subjects relevant to this permit. We note, however, that on July 3, 2002, the permittee submitted three new papers presenting biological analyses by its hired contractors.<sup>2</sup> As a result of the late date of the submission, EPA was not able to consider the new studies prior to issuance of the draft permit. EPA does, however, look forward to giving these analyses careful evaluation during the public comment period, along with any other public comments and/or new information that may be submitted.

Finally, EPA has also carefully considered the views on the development of this permit that have been submitted by the interested public, including organizations such as Save the Bay, the Conservation Law Foundation of New England, the Rhode Island Salt Water Anglers Association, and others. Based on their long history of work to enhance the stewardship of the natural resources of Mount Hope Bay (as well as other areas), these groups have provided factual knowledge and substantive expertise that is reflected in their comments to the agencies.

EPA greatly appreciates the time, effort and expertise that each organization mentioned above has contributed to improve the development of this permit.

<sup>&</sup>lt;sup>2</sup> The papers submitted by the permittee on July 3, 2002, are as follows: Hilborn, Ray and Andre Punt, "Analysis of Brayton Point Station's Impact on the Mt. Hope Bay Population of Winter Flounder" (June 29, 2002); DeAlteris, Joseph, "Trends in the Abundance of Five Fish Species in Mount Hope Bay: A Response to M. Gibson's Assessment of the Effect of Brayton Point Station on Fish Stocks in Mount Hope Bay" (July 1, 2002); and Hilborn, Ray and Andre Punt, "Calculation of Power Plant Impact on the Winter Flounder Population in Mt. Hope Bay Using Survey Data" (July 2, 2002).