# STATE OF CONNECTICUT
## DEPARTMENT OF ENVIRONMENTAL PROTECTION

*IN THE MATTER OF* : *APPLICATION NO. 199701876*

*MILLSTONE POWER STATION* : *AUGUST 30, 2010*

### *FINAL DECISION*

Dominion Nuclear Connecticut, Inc. (applicant/DNC), the owner and operator of the Millstone Power Station (MPS) in Waterford, Connecticut, has applied to renew its National Pollutant Discharge Elimination System (NPDES) permit for the withdrawal and discharge of waters from Niantic Bay into Long Island Sound associated with the operation of the MPS. In a February 17, 2010 Proposed Final Decision (PFD), a Department of Environmental Protection (DEP) hearing officer found that the Revised Draft Permit (RDP) would comply with all relevant state and federal statutes and regulations, and therefore recommended renewal of the NPDES permit pursuant to the proposed terms and conditions of the RDP.

The intervening party Nancy Burton and the Connecticut Coalition Against Millstone (Burton/CCAM) and the applicant DNC filed exceptions to the PFD. Each of Burton/CCAM's general and specific exceptions is either unsupported by the law or by the evidence in the record. The applicant's six specific exceptions reflect either an intention to preserve consistency with the facts in the hearing record or to correct typographical errors in the PFD. Each exception of the applicant is supported by the record and is thus incorporated into this final decision.



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This final decision affirms the PFD except as expressly provided herein, and adopts the hearing officer's recommendation to issue the revised draft permit to the applicant DNC. The evidence in the record shows that the renewed permit would comply with the applicable state and federal statutory and regulatory criteria. General Statutes §§ 22a-98, 22a-430; Regs., Conn. State Agencies §§ 22a-430-1 through 22a-430-8; 33 U.S.C. §§ 1326 (a) and 1326 (b).

By meeting such criteria, the applicant has met its burden of proving that the MPS discharge will not cause pollution to and will protect the waters of the state from pollution. General Statutes § 22a-430. The applicant has also demonstrated that the discharge is consistent with the applicable goals and policies of the Connecticut Coastal Management Act, in that such discharge activities incorporate all reasonable measures mitigating any adverse impacts on coastal resources. General Statutes §§ 22a-90 through 22a-112.

The evidence also shows that Burton/CCAM failed to meet its burden to establish a prima facie case that if the NPDES permit were issued, the likely result would be unreasonable pollution, impairment, or destruction of the public trust in the air, water or other natural resources of the state under § 22a-19 (a) of the Connecticut Environmental Protection Act (CEPA). General Statutes §§ 22a-14 through 22a-20.

## *I*

## *Procedural History*

The DEP issued an initial notice of its tentative determination to approve this application and issued a draft permit on August 24, 2006. The hearing officer granted Burton/CCAM intervening party status on December 20, 2006, pursuant to General Statutes § 22a-19 (a) and

Regs., Conn. State Agencies § 22a-3a-6 (k).[1] The hearing officer limited the scope of Burton/CCAM's intervention to the relevant issues that fell within the jurisdiction of the DEP that Burton/CCAM specifically raised in its petition to intervene[2] and also ruled that Burton/CCAM could provide evidence regarding its claim that closed-cycle cooling system is a feasible and prudent alternative to the conduct authorized by the RDP, but only if the hearing officer first concluded that Burton/CCAM successfully made a prima facie showing that Millstone's discharges were reasonably likely to cause unreasonable pollution. *Ruling on Notice of Intervention/Notice Regarding Pre-Hearing Schedule,* December 20, 2006.

A second notice and draft permit were released by the DEP on December 13, 2007. Ex. DEP-37. On September 29, 2008, DNC, DEP, and intervening parties, the Connecticut Fund for the Environment, Inc. (CFE) and Soundkeeper, Inc., filed an executed Stipulation with the hearing officer that successfully resolved the conflicting issues among these parties and

[1] Section 22a-19 (a) provides for intervention as a party "on the filing of a verified pleading asserting that the proceeding or action for judicial review involves conduct which has, or which is reasonably likely to have, the effect of unreasonably polluting, impairing or destroying the public trust in the air, water or other natural resources of the state." Section 22a-3a-6 (k) (A) provides that a person shall be granted status as an intervening party if a statute, including § 22a-19, confers a right to such status, and any conditions specified in that statute have been satisfied.

[2] The issues raised in Burton/CCAM's petition to intervene were: entrainment and impingement of marine life, impacts of the thermal component of the discharges on marine life and habitat, and whether interim flow measures and their timing would prevent adverse environmental impacts. Burton/CCAM's petition included claims regarding radioactive emissions, allegations of collusion and corruption on the part of DNC, Northeast Utilities, and the DEP, and other issues that were either not environmental in nature or were otherwise irrelevant to the current application. Intervening parties play a derivative role in a proceeding and may not introduce new claims to restyle an action, *Nizzardo v. State Traffic Commission*, 259 Conn. 131, 154 (2002); they are limited to raising environmental claims within the jurisdiction of a particular state agency, id. at 148.

supported the issuance of a September 26, 2008 Revised Draft Permit. Ex. DEP-39. The hearing proceeded on this RDP.

A hearing for public comment was held on December 4, 2008, at the DEP Marine Division Headquarters in Old Lyme, Connecticut. An evidentiary hearing was conducted at the DEP Headquarters in Hartford, Connecticut, over a period of eighteen days between January 6 and February 26, 2009.

The parties filed post-hearing memoranda and briefs on May 8, 2009. As directed, the parties addressed the question of whether Burton/CCAM had established a prima facie case that the conduct authorized by the RDP would be reasonably likely to have the effect of "unreasonably polluting, impairing, or destroying the public trust in the air, water or other natural resources of the state." General Statutes § 22a-19 (a). If a prima facie case of "unreasonable pollution" were successfully established under § 22a-19 (a), then § 22a-19 (b) requires the consideration of any "feasible and prudent" alternatives consistent with public health, safety, and welfare. The hearing officer ruled that Burton/CCAM had not made the requisite showing of a prima facie case under § 22a-19 (a); therefore, no further proceedings were required addressing feasible and prudent alternatives. *Ruling: Prima Facie Case of Unreasonable Pollution/Alternatives Analysis,* July 2, 2009.

The PFD was issued on February 17, 2010, following the close of the evidentiary hearing. In reaching her conclusions, the hearing officer reviewed the extensive record compiled in the administrative proceeding, defined in General Statutes § 4-177 (d) to include all evidence received and considered, questions and offers of proof and related objections and rulings, the transcript of the hearing, and the parties' post-hearing legal memoranda. The hearing officer also

evaluated the RDP in conjunction with the Stipulation executed by DNC, DEP, CFE and Soundkeeper, Inc.

Applying the substantial evidence to this matter in accordance with relevant state and federal laws and regulations, the hearing officer found that the RDP complies with General Statutes § 22a-430 for water discharge permits and the corresponding regulations, Regs., Conn. State Agencies §§ 22a-430-3 and 22a-430-4. She also found that the RDP is consistent with §§ 316 (a) and 316 (b) of the federal Clean Water Act, 33 U.S.C. §§ 1326 (a) and 1326 (b), and complies with the goals and policies of the Connecticut Coastal Management Act, General Statutes §§ 22a-90 through 22a-112. The hearing officer recommended that the Commissioner renew the NPDES permit held by DNC pursuant to the proposed terms and conditions of the RDP.[3]

On March 4, 2010, Burton/CCAM and DNC submitted exceptions to the PFD. On April 9, 2010, DNC submitted a brief in response to Burton/CCAM's exceptions. On the same date, Burton/CCAM submitted a brief in support of its exceptions. The brief essentially reiterates the March 4, 2010 exceptions and asserts some additional allegations; however, it fails to provide legal analysis or further the legal arguments of Burton/CCAM. On April 23, 2010, the applicant submitted a reply brief to the April 9, 2010 Burton/CCAM brief.

[3] On March 18, 2009, then-Commissioner, Gina McCarthy, delegated her authority to render a final decision on this application to Deputy Commissioner Susan Frechette. (DEP's current Commissioner, Amey Marrella, previously served as Deputy Commissioner and, in that capacity, was involved with DEP staff during its review of DNC's application.)

## *II*

### *Commissioner's Standard of Review*

"After the issuance of the proposed final decision, the filing of any exceptions and briefs, and presentation of any oral arguments, the Commissioner shall issue a written final decision in accordance with section 4-180 of the General Statutes. In [the] final decision, the Commissioner may affirm, modify, or reverse the proposed final decision, in whole or in part, or may remand to the hearing officer for further proceedings...." Regs., Conn. State Agencies § 22a-3a-6 (y) (3) (D). A proposed final decision may be affirmed if there is substantial evidence in the record as a whole to support the agency's decision. *Town of Newtown v. Keeney*, 234 Conn. 312, 319 (1995). "Findings of fact shall be based exclusively on the evidence in the record and on matters noticed." General Statutes § 4-180 (c).

Parties may submit exceptions to a proposed final decision, which must state "with particularity the party's or intervenor's objections to the proposed final decision, and may not raise legal issues or, subject to subsection (w) of this section, factual issues which could have been, but were not, raised at the hearing." Regs., Conn State Agencies § 22a-3a-6 (y) (3) (A). See also *Notice of Oral Argument and Briefing Schedule*, March 12, 2009. In addition, § 22a-3a-6 (w) of the Regulations of Connecticut State Agencies provides: "After the hearing, no further evidence shall be admitted unless it is relevant and material and there was good cause for the failure to offer it at the hearing."

## *III*

## *Burdens of Proof*

The applicant has the burden of demonstrating that the proposed RDP will protect the waters of the state from pollution. Section 22a-3a-6 (f) of the Regulations of Connecticut State Agencies places on an applicant "the burden of going forward with evidence and the burden of persuasion with respect to each issue which the Commissioner is required by law to consider in deciding whether to grant or deny the application." The applicant is required to show by a preponderance of the evidence that the proposed RDP will not cause pollution to and will protect the waters of the state from pollution pursuant to General Statutes § 22a-430 and the applicable portions of its corresponding regulations, Regs., Conn. State Agencies §§ 22a-430-1 through 22a-430-8. In addition, the applicant must demonstrate that its activities are consistent with all of the applicable goals and policies of the Connecticut Coastal Management Act and that those activities incorporate all reasonable measures mitigating any adverse impact on coastal resources. General Statutes §§ 22a-92, 22a-98. The applicant must meet its burden in accordance with these statutes and regulations before the Commissioner will approve the application. Regs., Conn. State Agencies § 22a-3a-6 (f).

Burton/CCAM has the burden as an intervening party of establishing a prima facie case that if the application is granted by the DEP, it is reasonably likely that unreasonable pollution, impairment, or destruction of the public trust in the air, water, or other natural resources will occur. This burden is required pursuant to the Connecticut Environmental Protection Act (CEPA), General Statutes §§ 22a-14 through 22a-20, as interpreted in *Manchester*

*Environmental Coalition. v. Stockton*, 184 Conn. 51, 57-58 (1981), and as further clarified in *City of Waterbury v. Town of Washington*, 260 Conn. 506, 549 (2002), when the Court held that "the term 'unreasonable impairment' must be evaluated through the lens of the entire statutory scheme, if any, that the legislature has created to regulate the conduct underlying the impairment." Here, the legislature has created a statutory scheme to regulate the question that is at issue in this final decision under General Statutes § 22a-430, which is whether the proposed activity will not cause pollution to and will protect the waters of Connecticut from pollution.[4]

The applicant successfully met its burden of proof by a preponderance of the evidence by showing that the discharge will not cause pollution to and will protect the state's waters from pollution. DNC also provided substantial evidence that the proposed activities are consistent with the applicable goals and policies of the Connecticut Coastal Management Act, as such activities incorporate all reasonable measures mitigating any adverse impacts on coastal resources.

The evidence in the record strongly supports the renewal of the NPDES permit pursuant to the terms and conditions of the RDP. The evidence includes the testimony of credible fact witnesses and convincing and qualified expert witnesses. "[T]he determination of the credibility of expert witnesses and the weight to be accorded their testimony is within the province of the trier of facts, who is privileged to adopt whatever testimony he reasonably believes to be

[4] General Statutes § 22a-19 does not override existing administrative procedures or existing statutes. Instead, this statute simply adds to the DEP's existing statutes governing discharges into waters of the state; thus, both burdens of proof apply in this application. *Nizzardo v. State Traffic Commission*, supra, 259 Conn. 155 (citing to Black's Law Dictionary, notes that a "supplemental act" such as CEPA "adds to or completes, or extends that which is already in existence without changing or modifying the original."). See also General Statutes § 22a-20 (CEPA "shall be supplementary to existing administrative and regulatory procedures provided by law....").

credible. "*Windels v. Environmental Protection Commission of the Town of Darien*, 284 Conn. 268, 291 (2007) (citing *Melilo v. New Haven*, 249 Conn. 138, 151 (1999) (internal quotation marks omitted; bracket in original)). Burton/CCAM provided no real evidence to rebut the applicant's position in favor of the renewal of its NPDES permit. See PFD, pp. 52-58. Burton/CCAM did not offer any direct expert testimony or documentary evidence refuting the consistent and reliable evidence presented by the applicant. In addition, in its cross-examination of witnesses for DNC and the DEP, Burton/CCAM failed to impeach the credibility of the witnesses or extract any new information relevant to the proceeding.[5] Because Burton/CCAM failed to establish a prima facie case of unreasonable pollution, the hearing officer did not have to consider any feasible or prudent alternatives to the proposed application.[6]

## *IV*

## *Burton/CCAM's Exceptions to the Proposed Final Decision*

### *A*

### *Connecticut Water Quality Standards*

Several of Burton/CCAM's exceptions allege that the RDP does not comply with the Connecticut Water Quality Standards (WQS).[7] See Burton/CCAM Exceptions Nos. A.1, B. ¶¶ 89, 90, C.1, D. 7, 9. These exceptions are not supported by the extensive record and are based on

[5] "It is well settled that our rule restricts cross-examination to matters covered in the direct examination, except as they involve credibility alone." *State v. Cooper*, 227 Conn. 417, 431 (1993) (internal citations and quotations omitted). See Connecticut Code of Evidence § 6-8 (a) (scope of cross-examination).

[6] *Quarry Knoll II Corp. v. Planning & Zoning Commission*, 256 Conn. 674, 736 n.33 (2001) (unless the intervenor had made the requisite showing under General Statutes § 22a-19 (a), i.e., provided some evidence to make out a prima facie case, the commission had no obligation to consider alternatives to the proposed application pursuant to General Statutes § 22a-19 (b)).

[7] More specifically, these exceptions concern the state's surface WQS. *Water Quality Standards*, State of Connecticut Department of Environmental Protection, December 17, 2002, pp. 1-7.

a misreading of the WQS. The hearing officer correctly concluded that the RDP meets the WQS. See, e.g., PFD, ¶¶88, 90, 97, and pp. 56, 70. [8]

"Before issuing a permit the permitting authority must, with reference to what is technologically feasible, incorporate 'discharge limitations necessary to satisfy the [state water quality] standard.'" *Piney Run Preservation Assn. v. County Commissioners of Carroll County*, 268 F.3d 255, 265-66 (4th Cir. 2001) (internal citations omitted; bracket in original). The federal Clean Water Act delegates to the states the task of creating water quality standards. 33 U.S.C. § 1313 (a). The Commissioner is required to adopt WQS that comply with the federal Clean Water Act. General Statutes § 22a-426.

The current WQS became effective on December 17, 2002. The goal of the WQS is "to restore or maintain the chemical, physical, and biological integrity of surface waters." WQS #1.[9] In promulgating the WQS, the DEP considered the competing interests in water use among various state citizens and industries.[10] This balancing test is recognized in the WQS whereby "*[e]xisting and designated uses* such as propagation of fish, shellfish, and wildlife, recreation, public water supply, agriculture, *industrial use* and navigation and the water necessary for their protection is to be maintained and protected." WQS #2. (Emphasis added.) Thus, the WQS acknowledge that current water uses must be maintained, including the water from the Niantic

[8] Please note that the wording of PFD ¶90 is being revised to preserve consistency with the facts in the record, as brought to light in the applicant's exceptions. This does not impact the hearing officer's conclusion. See infra, § V. # 6, Attachment A, # 4.

[9] This wording mirrors the goals of the federal Clean Water Act, "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251 (a).

[10] "[W]e agree... that in the Clean Water Act Congress struck a careful balance among competing policies and interests...." *Arkansas v. Oklahoma*, 503 U.S. 91, 106 (1992).

River used to cool the nuclear reactors at the MPS that is then discharged into Long Island Sound.

The fact and expert testimony offered by DNC and DEP, in addition to the exhibits in the record, substantiate the hearing officer's conclusion that the RDP complies with the WQS. As part of its review and evaluation of DNC's application and the development of the RDP, DEP staff considered the WQS and affirmatively concluded that the RDP complies with WQS. Exs. DEP-12, 38, 45. Experts for the applicant testified that the RDP complies with the WQS. See, e.g., test. D. Danila, 1/13/09, pp. 1043-1048; C. Coutant, 1/22/09, pp. 1678-1683, 1718-1719, 1730; and J. Kulowiec, 1/30/09, pp. 2049, 2077- 2079.

A significant number of provisions in the RDP provide specific support for compliance with the Connecticut WQS. Consistent with the Connecticut WQS and § 316 (a) of the Clean Water Act, the RDP provides that the discharges from the MPS shall not contain chemical constituents in concentrations that are harmful to human, animal, or aquatic life, or that make the receiving waters unsafe or unsuitable for fish or shellfish and their propagation or impair their palatability, or impair the waters for other uses. See, e.g., Ex. APP-131 § 5 (B) Table A Remark #7; test. J. Kulowiec, 1/30/09, pp. 2077-2079. The RDP sets out a maximum daily discharge limit for what are primarily once-through, non-contact cooling waters. A daily maximum is set for other smaller and intermittent discharges, such as the discharges from the MPS intake structure screen wastewaters, pump seal and bearing lubrication water and related process wastewaters, site storm water, groundwater, fire suppression system wastewaters, and plant operating systems-related drainage. See, e.g., Exs. APP-131 § 5 Tables A, B, C; DEP-38.

In addition to discharge limits, the RDP restricts the amount of water that can be drawn from the Niantic River for use at the MPS. See, e.g., Ex. APP-131 § 10 (C). The RDP also requires the installation of variable frequency drives (VFDs) to reduce the amount of cooling water used by the MPS. Ex. APP-131 § 10 (C) (5). These VFDs will operate during the winter flounder spawning season, which runs from April 4 to May 14, reducing the impingement mortality and entrainment of aquatic life, especially winter flounder larvae. The VFDs, used in conjunction with the spring refueling outages, will reduce entrainment impacts by forty to fifty percent. Ex. DEP-38 p. 5. The RDP requires the applicant to evaluate whether the VFDs can be used beyond the winter flounder spawning season. Ex. APP-131 § 10 (C) (5) (e) (ii).

Discharges are subject to federal effluent guidelines and standards. See, e.g., 40 C.F.R. Part 125 – Criteria and Standards for the National Pollutant Discharge Elimination System, 40 C.F.R. Part 423 – Steam Electric Power Generating Point Source Category. The RDP establishes general and specific effluent limitations and establishes monthly monitoring requirements, some of which are more stringent than the current NPDES permit. Ex. APP-131 §§ 4, 5. Effluent limitations are consistent with the "best available technology" determined on a case-by-case basis using "best professional judgment." These effluent standards are more stringent than those prescribed in federal law in 40 C.F.R. Part 423 and are based in part on the standards set forth in Regs., Conn. State Agencies, § 22a-430-2 (s) (2). Exs. APP-78, Attachment O: Discharge Information; APP-121; DEP-29, 30, 37; test. C. Nezianya, 2/6/09, pp. 2303–2311. The RDP requires that DNC implement and maintain practices and facilities that will produce the minimum amount of wastewater to the maximum extent possible and will prohibit the use of additional water to dilute effluent concentrations in the discharges. Ex. APP-78, Attachment L: Resource Conservation Strategies. In addition to requiring compliance with these limitations, the

RDP provides that the MPS is subject to DEP inspection at any time. Ex. APP-131 § 1 (C); see Regs., Conn. State Agencies § 22a-430-3 (c) (inspection and entry).

The RDP has effluent limitations for toxic substances such as heavy metals, free available and total residual chlorine, total suspended solids, oil and grease, and hydrazine, which are largely intermittent discharges. Monitoring of alternative corrosion inhibitors is also required under the RDP. Exs. APP-78, Attachment O: Discharge Information; APP-131 § 5 Tables J – N; DEP-37, 38, 40; test. J. Kulowiec, 1/30/09, pp. 2087-2094.

Specifically, the RDP requires that DNC reduce levels of hydrazine, which is monitored internally and at the point of discharge, by fifty percent compared to previously authorized levels. This significantly lower limit, in conjunction with the MPS hydrazine minimization program currently underway, will provide an even greater margin of safety to protect aquatic life in Long Island Sound. Exs. APP-6, 59, 66, 104, 116, 131 § 5 Table J; DEP-38; test. S. Matthess, 1/8/09, pp. 558-572; J. Kulowiec, 1/30/09, pp. 2048, 2087-2090; C. Nezianya, 2/6/09, p. 2303.

The RDP limits total residual chlorine to 0.1 milligrams/liter for the combined discharge from Unit 2 and Unit 3.[11] In addition, free available chlorine levels for other discharges, including the service water discharges from those units, cannot exceed 0.25 milligrams/liter. The RDP also requires that chlorine shall not be discharged in the condenser cooling water for more than two hours in any one day. These chlorine limits are more stringent than those in 40 C.F.R. Part 423 and reflect the DEP's best professional judgment. Exs. APP-131 § 5 Table A; DEP-38, 45; test. J. Kulowiec, 1/30/09, pp. 2066-2067; C. Nezianya, 2/9/09, pp. 2303-2305. The RDP

[11]The MPS is comprised of three units. Units 2 and 3 are active; Unit 1 was shut down in 1995 and is being decommissioned. Test. R. MacManus, 1/6/09, pp. 53-54.

establishes a maximum daily concentration of 15 milligrams/liter of oil and grease. This daily concentration includes direct discharges and internal waste streams, including various storm-drain outfalls, to receiving waters. These effluent limitations are more stringent than those in 40 C.F.R. Part 423 and reflect the DEP's best professional judgment. See Regs., Conn. State Agencies § 22a-430-4 (*l*); exs. APP-131 § 5 Table A; DEP-29, 38, 45; test. J. Kulowiec, 1/30/09, p. 2080.

The RDP establishes a maximum daily concentration of 30 milligrams/liter of total suspended solids. This daily concentration includes direct discharges and internal waste streams to receiving waters. These effluent limitations are more stringent than those in 40 C.F.R. Part 423 and reflect the DEP's best professional judgment. See Regs., Conn. State Agencies § 22a-430-4 (*l*); exs. APP-131 § 5 Table A; DEP-29, 38, 45; test. J. Kulowiec, 1/30/09, p. 2080.

Effluent limits and monitoring for heavy metals, such as boron, cadmium, copper, iron, lead, and zinc, have been established for several discharges at the MPS, primarily for internal waste stream operations. All of the limits are the same as those in the current NPDES permit. The RDP contains average monthly effluent limits of 1 milligram/liter for the total amounts of chromium, copper, nickel, iron, and zinc and 0.1 milligrams/liter for cadmium and lead for wastewaters associated with steam generator chemical cleaning and decontamination. Steam generator chemical cleaning and decontamination at the MPS are processes that occur very infrequently. The effluent limits for heavy metals are either more stringent than EPA limits or meet EPA limits, which are established in 40 C.F.R. Part 423. See Regs., Conn. State Agencies § 22a-430-4 (*l*); exs. APP-131 § 5 Tables C, E; DEP-38, 45; test. J. Kulowiec, 1/30/09, pp. 2084-2085, 2174, 2195.

Certain chemicals used at the MPS for corrosion control and metallurgy protection are monitored to show that only trace levels are present in the discharges. These chemicals include ethanolamine (ETA), methoxypropylamine, dimethylamine, and dimethyldithiocarbamate. These chemicals are used infrequently and are pre-screened for their low toxicity. Exs. APP-5, 131 § 5 Tables J, K, L; DEP-38; test. J. Kulowiec, 1/30/09, pp. 2090-2094.

The RDP also requires limits for a number of internal waste streams at the MPS, including limits on flow, which reflect the DEP staff's best professional judgment. Many of the internal waste stream limits have been continued from the current NPDES permit. Discharges from internal waste streams require treatment before they are dispersed into Long Island Sound and these limits help to ensure that the treatment systems are effective and not overloaded. Exs. APP-78 Attachment I: Operation and Maintenance of the Collection and Treatment Systems; APP-116, 131 § 5 Tables A-E; DEP-37, 38, 45; test. J. Kulowiec, 1/23/09, p. 1993 and 1/30/09, pp. 2043-2044.

The RDP requires that no discharge shall cause acute or chronic toxicity in the receiving water body beyond any zone of influence specifically allocated to that discharge in the RDP. Ex. APP-131 § 4 (B). The standard for compliance is "100 percent nontoxic"; this is the same standard in the current NPDES permit. Since 2001, when DNC acquired ownership of the MPS, the "pass rate" in terms of toxicity testing has been one hundred percent. Ex. APP-131 § 5 Tables A, II, JJ; test. J. Kulowiec, 1/30/09, pp. 2068-2073, 2105.

Regular acute and chronic toxicity testing, as well as chronic aquatic toxicity testing, are required under the RDP to ensure that the discharge is not harming aquatic life in Long Island

Sound.[12] The RDP requires acute and chronic toxicity tests to be conducted four times per year. The requirement for chronic testing in addition to acute testing is a new permit requirement. Exs. APP-131 §§ 6 (B), 7; DEP-8, Appendix A pp. A-1, A-2, 38, 45; test. J. Kulowiec, 1/30/09, pp. 2105-2106, 2062, 2067, 2073, 2144-2145.

The applicant has provided an updated spill prevention and control plan with all the required certifications. This plan is designed to prevent and control spills, leaks, and other unplanned or accidental releases of toxic or hazardous substances from the MPS.

The applicant has taken significant further measures to prevent any contamination of Long Island Sound and to meet Connecticut WQS. These measures include a secondary containment system for the oil storage tank, the oil loading area and oil-cooled transformers, water separators to treat storm water prior to discharge, containment areas for lubricating oil and hydraulic oils, and storage areas for cleaning chemicals. For sodium hydroxide, sulfuric acid, sodium hypochlorite, and scale inhibitor storage areas, the applicant has constructed curbs for secondary containment or drains routed to chemical sumps which send spills to the treatment system or back to the process. Exs. APP-7 Attachment K, 108, 112; DEP-38, 45; test. J. Kulowiec, 1/30/09, pp. 2034-2035, 2041.

[12] An acute toxicity test measures a discharge's potential to pose an immediate threat to aquatic life from the toxic constituents of a discharge. A chronic toxicity test assesses the long-term potential for harm to reproductive and growth processes needed to sustain healthy aquatic species based upon the toxic constituents in a discharge. Ex. DEP-38, p. 18.

The RDP specifically regulates what types of wastewater discharges need to be treated before entering the receiving waters. Some discharges do not require any treatment, such as non-contact cooling water and service water. For those wastewaters from plant processes that are required to be treated, several treatment systems are in place, including: neutralization, coagulation, activated charcoal filtration, ion-exchange demineralization, oil/water separation, and batch treatment. Hydrazine is monitored internally; there is also a comprehensive hydrazine minimization and treatment program that will continue under the RDP. Exs. APP-5, 6, 59, 66, 78/Attachment I: Operation and Maintenance for Collection and Treatment Systems/Attachment M: Line Drawing and Process Schematic, APP-104, 116, 131 § 5, see, e.g., Table J; DEP-37, 38/Table 1, 45; test. S. Matthess, 1/8/09, pp. 555-572. The RDP specifies which treatment systems will be utilized and outlines requirements for monitoring the treatment systems. The RDP also requires that screenings, sludge, chemicals, and oils resulting from the wastewater treatment processes be disposed of at approved locations or hauled off-site by a licensed waste hauler. These treatment systems prevent harmful discharged constituents from entering the Long Island Sound. Exs. APP-131; DEP-38 Table 1: Summary Description of Wastewater Discharges and Treatment at Millstone Station; test. S. Matthess, 1/8/09, pp. 546-558.

The current NPDES permit and the RDP require specific effluent and ecological sampling and monitoring. Ex. APP-131 § 5 Tables AA - JJ. The RDP requires more frequent sampling in certain cases compared to the current NPDES permit. Both permits mandate that the sampling and monitoring results be submitted in monthly discharge monitoring reports to the DEP. Exs. APP-131 §§ 6, 7, 8; DEP-38 Table 1; test. S. Matthess, 1/8/09, pp. 528-529, 542-544; J. Kulowiec, 1/30/09, pp. 2061-2062, 2064. The MPS laboratories have satisfied the sampling and monitoring requirements under the current NPDES permit and they are sufficiently capable

of providing the additional data under the RDP. Test. S. Matthess, 1/8/09, pp. 529-554, 574-576; D. Danila, 1/13/09, p. 1051; see also R. Rountree, 1/15/09, pp. 1498-1499; C. Coutant, 1/22/09, pp. 1730-1731 (testimonies regarding quality of data collection, laboratory work).

Burton/CCAM alleges that the discharge from the MPS is prohibited by #9(A) of the WQS because it flows into Class SA surface waters. Burton/CCAM Exceptions Nos. A. 1., B. ¶¶ 89, 90, C. 1., D. 7; Burton/CCAM Brief in Support of Statement of Exceptions No. 1. Number #10 of the WQS, however, allows the DEP Commissioner to establish a "zone of influence" when permitting discharges "in order to allocate a portion of the receiving surface waters for mixing and assimilation of the discharge." A zone of influence is a specific and limited area of receiving water where the water quality standards do not need to be met. Paragraphs (A) through (E) of #10 of the WQS outline the specific factors that the Commissioner must consider in establishing a zone of influence. Burton/CCAM misunderstands the relationship between #9 and #10 of the WQS, and fails to recognize that #10 provides a limited exception to the application of the WQS in the specific zone of influence for the MPS discharges, even though the receiving water is Class SA.

In arguing that #10 does not apply to discharges that are prohibited by #9, Burton/CCAM has failed to take into account a fundamental rule of statutory construction that applies to the interpretation of these numbered standards. See General Statutes § 22a-426 (a). There is an "overriding principle that statutes should be construed, where possible, so as to create a rational, coherent and consistent body of law." *Waterbury v. Washington*, supra, 260 Conn. 557. Number 10 of the WQS is intended to apply to those situations when, assuming other legal requirements are met, DEP staff, in their best professional judgment, determine a zone of influence for the

mixing and assimilation of the discharge is appropriate, regardless of the classification of the receiving water under # 9. If the applicability of #10 were strictly contingent upon the receiving water's classification under #9, then the statutory language giving the Commissioner discretion to carve out an exclusionary zone of influence would be of no consequence.

The Statement of Reasons for the Connecticut Water Quality Standards Revisions provides further support for this interpretation of #10. The Statement of Reasons, which was the result of a public hearing on April 20, 2000, includes the DEP's responses to public comment on the revised WQS. The Statement of Reasons is part of the record of the WQS revision process and is available for public review. In response to Comment 48, the DEP stated: "Connecticut's water quality criteria apply to all surface waters *with the exclusion* of waters within an allocated zone of influence." (Emphasis added.) In addition, the DEP response to Comment 51 emphasized that WQS #10 "provides that water quality criteria apply *outside* the ZOI [zone of influence]. This means that certain uses may not be attained within the ZOI." (Emphasis added.)

Thus, the discharge into the receiving water within the zone of influence established by the Commissioner under #10 need not be limited by the classification-based criteria identified in #9. In addition, in Appendix A to the Connecticut WQS, the definition of "zone of influence" supports some degree of degradation of water quality or inconsistency with water quality criteria due to pollutants. More specifically, a "zone of influence means an area or volume of surface water or ground water within which some degradation of water quality or inconsistency with water quality criteria is anticipated as a result of a pollutant discharge. The term zone of influence may be used to describe an area impacted by thermal, conventional, or toxic

pollutants." Connecticut WQS, Appendix A, p.A-6. Therefore, #10 of the Connecticut WQS carves out a limited exception to the water quality criteria identified in #9.[13]

In establishing a zone of influence the Commissioner must consider the factors set forth in paragraphs (A) through (E) of WQS #10. These factors, which were found to be satisfied by the DEP when it reviewed and tentatively approved DNC's application, are: (A) the characteristics of the thermal discharge, (B) an allowance for a continuous zone of passage for free swimming and drifting organisms, (C) the effect of the discharge on spawning grounds or nursery areas of sensitive aquatic organisms or areas utilized by aquatic organisms for shelter and living space, (D) the effect of the discharge on the aesthetic quality of the receiving water, and (E) the location of other discharges in the receiving surface water body to insure that the cumulative effect of adjacent zones of influence will not significantly reduce the environmental value or preclude any existing or designated uses of the receiving surface water. The RDP contains specific provisions that are consistent with these requirements, such as the requirement that DNC submit an Annual Report on continuing biological studies to evaluate the effects of the thermal discharge to assure the protection and propagation of a balanced indigenous population of fish, shellfish and other aquatic life in the receiving waters near the MPS. The RDP also requires that DNC remap the thermal plume and evaluate changes in the outfall structure that may lead to further minimization of the areal extent of the thermal zone of influence. See, e.g.,

[13] "We recognize our usual rule of according deference to the construction given a statute by the agency charged with its enforcement. *Anderson v. Ludgin,* 175 Conn. 545, 555, 400 A.2d 712 (1978). Deference may be appropriate when the issue is the application of general statutory language to a particular fact-bound controversy. As we have stated many times, 'the factual and discretionary determinations of administrative agencies are to be given considerable weight by the courts....'" *Bridgeport Hospital v. Commission on Human Rights & Opportunities,* 232 Conn. 91, 109 (1995) (citing *Wilson v. Freedom of Information Commission,* 181 Conn. 324, 342-43 (1980)).

Exs. APP-131 § 5 Table A, Remark (4), § 10 (A), (U), (V); see also APP-1, 65, 67, 73, 83, 93, 97, 103, 107, 119, 122, 124, 129, 129a; DEP-8 #10, 21, 37, 38, 45, 46; test. D. Danila, 1/13/09, pp. 970-987, 991-1047; C. Coutant, 1/22/09, pp. 1680, 1716-1717; J. Kulowiec, 1/30/09, pp. 2045-2046, 2073-2077; C. Nezianya, 2/6/09, pp. 2301-2305; D. Simpson, 2/6/09, pp. 2328-2329.

Number 10 of the WQS also states that the zone of influence for the assimilation of a thermal discharge "shall be limited to the maximum extent possible" and "[a]s a guideline, the zone of influence for assimilation of a thermal discharge shall be no greater than 25% of the cross-sectional area or volume of flow of the receiving water." Consistent with the current NPDES permit, the RDP establishes a zone of influence that shall not exceed a radius of 8000 feet from the discharge outlet at the quarry cuts. Ex. APP-131, Remark (3) of Table A, p. 11. This 8000-foot limit is based on a thermal plume model developed for the MPS. The mixing zone, defined by the area where an effluent discharge undergoes initial dilution and the extent of a four-degree F rise in ambient water temperature, is well within the 8000-foot limit. Thus, once the discharged waters reach the edge of the 8000-foot limit, they have completely cooled and assimilated to the ambient temperature of the receiving waters. Exs. APP-1, 67, 119, 122, 131; DEP-38; test. C. Coutant, 1/22/09, pp. 1749-1750, 1772-1781.

Based on the conditions and standards articulated by the RDP and the performance of the MPS in accordance with the current NPDES permit, the record demonstrates that there has been and will continue to be satisfactory compliance with the Connecticut WQS. Exs. APP-98, 131 Table A, Remark (7); test. J. Kulowiec, 1/30/09, pp. 2073-2079, 2119-2121; C. Coutant, 1/22/09, pp. 1716-1720, 1729-1733, 1736, 1742-1743; C. Nezianya, 2/9/09, pp. 2561-2563. On the

contrary, Burton/CCAM has failed to cite any evidence challenging the hearing officer's findings relating to the renewed permit's compliance with Connecticut WQS.

***B***

***Connecticut WQS and the MPS Thermal Discharge***

Burton/CCAM raised several exceptions regarding the compliance of the MPS's thermal discharge with § 316 (a) of the Clean Water Act. See Burton/CCAM Exceptions Nos. A. 1, B. ¶¶31, 41, 87, 89, 90, C. 1, D. 6, 9. The record fully supports the hearing officer's findings and conclusion that the thermal component of the discharge assures the protection and propagation of a balanced and indigenous population of fish, wildlife, and shellfish in the receiving waters consistent with the requirements of § 316 (a). See PFD ¶¶41, 86-97, pp. 65-67.

During the course of the hearing, multiple expert witnesses provided detailed testimony that included focused studies specific to the thermal component of the discharge. The collected data has shown that the thermal discharge has not negatively affected the balanced and indigenous population of fish, wildlife, and shellfish in Long Island Sound. In fact, the thermal impacts from the discharge have been monitored for over thirty years. Exs. DEP-38 p. 6; DEP-129; test. D. Danila, 1/13/09, pp. 971-972. DNC presented exhibits and expert testimony, all supporting DEP staff's conclusion that the MPS thermal discharge is consistent with Connecticut WQS and that those standards are sufficient to assure the protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife in and on the receiving waters as required by § 316 (a). 33 U.S.C. § 1326 (a). Exs. APP-1, 79, 83/Appendix IV, 107, 119, 122, 124, 129; DEP-12, 38; test. D. Danila, Hearing Transcript, 1/13/09, pp. 1045-1047; C. Coutant,

1/22/09, pp. 1680-1684, 1697-1720, 1725-1743; J. Kulowiec, 1/30/09, pp. 2115-2116; C. Nezianya, 2/6/09, pp. 2300-2306.

Number 10 of the Connecticut WQS provides that water quality criteria shall apply outside the zone of influence for a discharge. Since the portion of Long Island Sound into which the MPS discharges is designated as a Class SA water body, the Connecticut WQS allow only certain water temperature increases: "There shall be no changes from natural conditions that would impair any existing or designated uses assigned to this Class and, in no case exceed 83 degrees F, or in any case raise the temperature of the receiving water more than 4 degrees F. During the period including July, August, and September, the temperature of the receiving water shall not be raised more than 1.5 degrees F unless it can be shown that spawning and growth of indigenous organisms will not be significantly affected." Ex. DEP-8 p.17 (Class SA Criteria). See also Exs. APP-131; DEP-38; test. C. Coutant, 1/22/09, pp. 1682-1684.

The requirements for the thermal discharges from the MPS are consistent with the WQS and are reflected directly in the RDP, which imposes a 105-degree F maximum temperature limit on the discharge from the quarry cuts into Long Island Sound. The RDP also prohibits the discharge from increasing the temperature of the receiving waters above 83 degrees F, or, in any case, from raising the temperature of the receiving waters by more than 4 degrees F outside the mixing zone. During July, August, and September, the increase in temperature is more than 1.5 degrees F, but less than 4 degrees F; this increase will not significantly affect spawning and growth of indigenous organisms. Exs. APP-1, 12, 65 Part II. p. 2-18, APP-67, 73, 129, 131 § 5 Table A, Remarks (2), (3), § 10 (V); DEP-8 p. 17; DEP-38 pp. 6-10; test. C. Coutant, 1/22/09, pp. 1682-1684, 1686- 1701, 1736; D. Simpson, 2/11/09, pp. 2759-2761.

The RDP also includes conditions limiting the delta-T, which is the difference between the temperature of the intake water and the temperature of the discharged water entering the receiving water body. Specific limits on delta-T for the discharge from Unit 2 and the discharge from Unit 3 are set out in the RDP. Exs. APP-131 Tables C Remark (2), Table O Remark (2); DEP-38 p. 8. The RDP requires that after May 14 of each year, the intake flows remain reduced until June 5 or the date when the water temperature at the cooling water intake structures exceeds 52 degrees F, whichever is sooner. Ex. APP-131 § 5(C) (1) and (2). This requirement is to protect the winter flounder larvae. Because the operation of the VFDs during this winter flounder spawning season will reduce the amount of water available to transfer the heat generated by the operation of the MPS, the temperature of the water discharged will rise. The RDP establishes a higher delta-T when the VFDs are in use; however, the maximum temperature of the discharge still cannot exceed 105 degrees F. The use of the VFDs will not violate the requirement that the temperature of the receiving waters will not increase above 83 degrees F, or by more than 4 degrees F outside the mixing zone. The small temperature increase for a short duration will have minimal effect on the resident aquatic life in the immediate discharge area. Exs. APP-67 p. 8, 119, 122, 124, 131 § 5 10 (C), Table C Remark (2), Table O Remark (2); DEP-12, 38 pp. 8-9, 45; test. D. Danila, 1/13/09, pp. 982- 984; C. Coutant, 1/22/09, pp. 1702-1706; J. Kulowiec, 1/30/09, pp. 2045-2046.

Burton/CCAM's proposition that the thermal impact from the discharge will have harmful effects on the marine life and aquatic environment is called into question based on the significant body of data that has been accumulated over years of repeated observations and examinations of marine life and the aquatic environment that reaches the contrary conclusion. More than thirty years of scientific data have established that the thermal impacts from the

discharge are limited to a small geographic area near the immediate vicinity of the discharge outlet and do not threaten species' viability or the ecological integrity of the surrounding waters of Niantic Bay, Jordan Cove, or the Long Island Sound. In fact, the discharge outlet is well-suited for heat dissipation because the strong water currents off of Millstone Point assimilate the discharged waters quickly, thus limiting their impact on aquatic life. The thermal discharge from the MPS does not impede fish migration because of the open water nature of the discharge area, which provides for rapid dilution to ambient water temperatures and ample opportunity for fish to move around any potential thermal barrier. Exs. APP-67, 107, 119, 122, 124, 129; DEP-12 p. 14, 38 pp. 6-7, 14-16; test. D. Danila, 1/13/09, pp. 1045-1051; C. Coutant, 1/22/09, pp. 1696-1706, 1728, 1742-1743, 1771; D. Simpson, 2/11/09, pp. 2758-2762.

Burton/CCAM has failed to introduce any compelling evidence to demonstrate that the MPS thermal discharge under the RDP does not comply with § 316 (a) of the Clean Water Act and Connecticut WQS. The substantial evidence in the record supports the hearing officer's conclusion that the MPS thermal discharge under the RDP fully complies with § 316 (a) and Connecticut WQS.

### *C*

### *Best Technology Available Determination under § 316 (b) of the Clean Water Act*

Section 316 (b) of the Clean Water Act applies to cooling water intake structures, including those at the MPS. Burton/CCAM asserts in its exceptions that the RDP does not contain the best technology available ("BTA") under § 316 (b). Exceptions Nos. A.3, B ¶¶ 98-110, C.3, D.3, 10. Burton/CCAM argues that the best technology available is a closed-cycle cooling system and it should be required in the RDP.

Burton/CCAM mischaracterizes the meaning of "best technology available" pursuant to § 316 (b). More relevant to this permit proceeding, Burton/CCAM misunderstands the "best technology available" determination made by the DEP that is reflected in the RDP. The hearing officer properly concluded that the RDP contains a sufficient BTA determination. See PFD ¶¶52-56, 84-85, 98-110 and pp. 54, 67-70.

Burton/CCAM's interpretation of "best technology available" is aligned with the Second Circuit's analysis in *Riverkeeper, Inc. v. EPA*, 475 F.3d 83, 99-100 (2d Cir. 2007). However, this interpretation was overturned by the U.S. Supreme Court in *Entergy Corp. v. Riverkeeper, Inc.*, 556 U.S. ___, 129 S. Ct. 1498 (2009). The Court disagreed with the Second Circuit's definition of "best technology available" as "the technology that achieves the greatest reduction in adverse environmental impacts at a cost that can reasonably be borne by the industry. 475 F. 3d, at 99-100." *Entergy Corp. v. Riverkeeper*, supra, 129 S. Ct. at 1505-1506. The Court held that "the 'best' technology ...may well be the one that produces the most of some good... [b]ut, 'best technology' may also describe the technology that *most efficiently* produces some good." Id. at 1506 (emphasis in original). This could also describe a technology that "produces a good at the lowest per-unit cost, even if it produces a lesser quantity of that good than other available technologies." Id.

The Court found that elsewhere in the Clean Water Act, Congress had made it clear when it wanted to mandate the greatest possible reduction in water pollution. See, e.g., 33 U.S.C. § 1311 (b) (2) (A) ("elimination of discharges"); 33 U.S.C. § 1316 (a) (1) ("no discharges"). "When Congress wished to mandate the greatest feasible reduction in water pollution, it did so in plain language." 129 S. Ct. at 1506. The use of the goal of "minimizing adverse environmental

impacts" in 33 U.S.C. § 1326 (b) "suggests ... that the [EPA] retains some discretion to determine the extent of reduction that is warranted under the circumstances...[and] [t]hat determination could plausibly involve a consideration of the benefits derived from reductions and the costs of achieving them." Id.

The Court also rejected the Second Circuit's interpretation that the "best technology available" standard under § 316 (b) precluded the use of cost-benefit analysis. Id. at 1507. The Court stated: "[T]he EPA's current practice [of using cost-benefit analysis in analyzing whether certain technology is necessary to meet the best technology available standard] is a reasonable and hence legitimate exercise of its discretion to weigh benefits against costs that the agency has been proceeding in essentially this fashion for over 30 years." Id. at 1509 (internal citations omitted). "As early as 1977, the agency determined that, while § 1326 (b) does not *require* cost-benefit analysis, it is also not reasonable to 'interpret Section [1326 (b)] as requiring use of technology whose cost is wholly disproportionate to the environmental benefit to be gained.'" Id. (internal citations omitted; emphasis in original). The Court also found "no statutory basis for limiting [the use of cost-benefit analysis in § 316 (b) determinations] to situations where the benefits are *de minimis* rather than significantly disproportionate." Id. at 1510.

The EPA and delegated states, including Connecticut, have implemented the requirements of § 316 (b) using their best professional judgment. See *Natural Resources Defense Council, Inc. v. EPA*, 822 F.2d 104, 111 (D.C. Cir. 1987) ("If no national standards have been promulgated... the permit writer is authorized to use, on a case-by-case basis, best professional judgment to impose such conditions as the permit writer determines are necessary to carry out the provisions of the [Clean Water Act]." (internal citations omitted). Best professional

judgment takes into account the evolving character of technology. See 69 Fed. Reg. 41597 ("EPA has the legal authority to identify section 316 (b) requirements as an evolving set of technologies, rather than a single array fixed in time."). Without specific regulations applicable to Millstone under § 316 (b), delegated agencies such as the DEP will continue to make § 316 (b) determinations using their best professional judgment. See Ex. APP-121.

In its exceptions, Burton/CCAM claims that the RDP does not reflect BTA because it does not require closed-cycle cooling for the MPS. However, the significant list of various technological and operational requirements in the RDP constitutes BTA in the best professional judgment of the DEP staff. As was explained by expert witnesses for DNC during the hearing, a BTA determination involves several elements, some of which can be implemented immediately or in the very near future, such as the installation and operation of VFDs. It also includes other elements that would be under future consideration, if adequate and additional information can be obtained which indicates that those particular technologies might be applicable and appropriate at the facility. Ex. APP-131 § 3 (A); test. W. Micheletti, 2/5/09, pp. 2247-2251; C. Nezianya, 2/6/09, pp. 2306-2311.

Section 10 of the RDP identifies the specific actions that DNC must take in order to satisfy the Commissioner that any proposed technological and operational measures for minimizing adverse impacts associated with the use of the cooling water intake structures at the MPS will meet the standards of § 316 (b) and reflect the BTA for minimizing adverse environmental impacts. Ex. APP-131, Stipulation, pp. 4-6, 9; test. C. Nezianya, 2/6/09, pp. 2306-2308 (BTA determination based on requirements of §10). These provisions are paraphrased as follows:

1. § 10 (A) -- Conduct annual biological studies of the supplying and receiving waters around MPS, including intertidal and sub-tidal benthic communities, finfish communities, entrained plankton, and lobster and winter flounder populations. Submit an annual scope of study to the Commissioner relating to the continuation of such studies for the next year. Submit an annual report of the results of the biological studies to the Commissioner. Maintain and make available to the DEP an electronic database of the comprehensive time series of all data collected in association with these biological studies.

2. § 10 (B) – Take all reasonable steps to ensure that all planned spring refueling outages occur between April 4 and May 14 in a calendar year.

3. § 10 (C) -- Comply with water intake flow limits outlined in Table 1 and (after January 1, 2011) Table 2 in the permit. Design, acquire, install, operate and maintain variable frequency drives ("VFDs") to comply with the flow limits established in Table 2. Submit an annual ecological report that shall include flow monitoring data and other measurements to demonstrate compliance with entrainment reduction performance standards. Evaluate the efficacy of the VFDs in achieving compliance with the intake flow limits and evaluate whether such frequency drives, individually or in combination with other existing operational measures, are capable of extending the duration of the flow reductions beyond May 14 or no later than June 5, depending on water temperature at the inlet to the intake structures.

4. § 10 (D) and (E) – Conduct and report the results of a study to examine, in a laboratory setting, the efficacy of fine mesh screens to reduce entrainment of winter flounder larvae. This evaluation will include the feasibility of implementing fine mesh screens at cooling water intake structures at MPS.

5. § 10 (F) and (G) -- Participate in a Nitrogen Working Group to review and evaluate nitrogen loading and management in the Niantic River and provide assistance in evaluating categorical management actions that would help reduce nitrogen loads to the River. Make available all data collected pursuant to §10 (F) and contribute to final report of Working Group, which provides a comprehensive and thorough analysis of its activities and accomplishments in the Working Group effort; this shall also be part of the annual Ecological Report of environmental studies to the DEP. (Ex. APP-129.)

6. § 10 (H) and (I) – Following approval by the Commissioner, conduct a study on the feasibility of methods of augmenting natural reproduction of the Niantic River population of winter flounder. Submit a comprehensive and thorough report, which describes in detail the investigation performed and recommends a pilot demonstration project to determine the feasibility and long-term efficacy of a full-scale winter flounder stock augmentation program for the Niantic River population.

7. § 10 (J) --- On or before one year after the issuance of the permit, submit a report to the DEP that evaluates winter flounder population dynamics and impact assessment modeling issues (as set out in detail in the permit).

8. § 10 (K) -- To determine the best technology available (BTA) that can be implemented for the Unit 2 and Unit 3 cooling water intake structures at MPS, prepare a scope of study and schedule for a detailed and comprehensive evaluation of all technological and operational measures for minimizing adverse impacts associated with the use of the cooling water intake structures at MPS. Such scope of study shall include: (1) An identification of all measures that are available to minimize adverse impacts from impingement mortality and entrainment, including all fine-mesh screen technologies and closed-cycle recirculation systems and evaluating the impacts, including costs and reliability, and siting, geologic and hydrologic impacts that each of the measures to be evaluated will have at MPS and proposals to minimize such impacts to the extent practicable; (2) An identification of all known or potential biological, chemical and environmental impacts from each of the measures to be evaluated, including but not limited to impacts to the waters of the state and air quality and a proposed method for measuring each impact and proposals to minimize such impacts to the extent practicable; and (3) A calculation of the reduction in impingement mortality and entrainment of all life stages of fish and shellfish that would be achieved by each of the measures evaluated.

9. § 10 (L) and (M) – Perform the evaluation in accord with an approved scope of study and schedule and submit for the Commissioner's review and written approval a thorough and comprehensive report by no later than two years and ten months from the date of approval of the scope of study. This report shall include the issues in the scope of study, the detailed findings of the evaluation, and a recommendation of the preferred measure for installation at MPS in accordance with the findings of the evaluation. If the evaluation does not fully evaluate whether a measure can be implemented by MPS or provide information on a measure to the satisfaction of the Commissioner, provide any additional information requested by the Commissioner in accord with a supplemental plan and schedule approved by the Commissioner.

10. §10(N),(O)and(P)- Conduct Impingement and Entrainment Characterization (IMEC) Study to provide information to characterize current impingement and entrainment mortality and to support the development of a calculation baseline based upon historical operations associated with the cooling water intake structures for Unit 2 and Unit 3. This study shall be submitted two years and ten months from the date of approval of the scope of study. If the study does not fully evaluate the baseline impingement mortality and entrainment impacts for the cooling water intake structures, provide any additional information requested by the Commissioner in accord with a supplemental plan and schedule approved by the Commissioner.

11. § 10 (Q) -- Provide progress reports on or before January 1 and July 1 of each calendar year following issuance of the permit and continuing until all actions required by §10(K) to (P) have been completed to the Commissioner's satisfaction. Upon completion of certain individual milestones, detailed in § 10(Q)(2)(i) to (v) in accordance with a schedule set out in this section, submit an interim milestone report to the Commissioner.

12. § 10 (R) -- Based upon the Commissioner's review and consideration of the information included in the reports submitted pursuant to §§ 10 (L) and (Q) and any supplemental reports provided pursuant to §§ 10 (M) and (P), any other information and any subsequent law or regulation that is in effect at such time, the Commissioner shall make a subsequent BTA determination consistent with § 316(b) of the Clean Water Act and § 22a-430 of the General Statutes that requires the implementation of measures that reflect the BTA for the cooling water intake structures at MPS to minimize, to the greatest extent possible, adverse environmental impacts. The Commissioner shall provide notice of such determination and modifications to this permit to implement any requirement associated with this subsequent BTA determination, through a permit proceeding, including public notice and an opportunity for a public hearing.

13. § 10 (S) -- Perform sampling and analysis of the final effluent after chemical cleaning and/or chemical decontamination has been initiated.

14. §10 (T) -- Submit an annual report regarding all discharges that have been redirected to an alternative pathway as provided pursuant to this permit.

15. § 10 (U) and (V) -- Submit for the Commissioner's approval and conduct an evaluation of changes in the structure of the quarry cut outfalls to further minimize the areal extent of the thermal zone of influence, the pooling of undiluted thermal effluent adjacent to the discharge, and the incidence of fish migration into the quarry associated with reduced flow velocity. Submit a report for the Commissioner describing the results of the study, including specific thermal plume mapping and recommendations and a schedule to modify the current mixing zone and quarry cut cross-sectional areas if warranted based on results of field measurements.

Ex. APP-131 §10(C).

In 1993, Northeast Utilities, the former owner of the MPS, conducted a feasibility study to review flow reduction technologies and concluded that there were no cooling water alternatives that would measurably increase the winter flounder population. This conceptual study did not provide a detailed evaluation of which of the technologies examined could actually

be implemented at the MPS. DNC conducted a conceptual study in 2001. The Feasibility Study (Study) under § 10 (K) and (M) of the RDP, however, will examine the potential technological and operational measures at the MPS, including, but not limited to, closed-cycle cooling, for minimizing adverse environmental impacts. This Study is critical for determining whether the MPS is able to be retrofitted with closed-cycle cooling or whether the costs of implementing closed-cycle cooling would far exceed and thus outweigh the environmental benefits. Following completion of this Study, in accordance with § 10 (R) of the RDP, the Commissioner shall make a subsequent BTA determination, utilizing all then-available information. Consequently, a complete and final BTA is still contingent upon the results of the Feasibility Study.[14] Exs. APP-131 § 10 (C), DEP-38; test. W. Micheletti, 2/5/09, pp. 2248-2251, 2257-2258; C. Nezianya, 2/6/09, p. 2306.

Based upon all reasonably available and pertinent data or information and using its best professional judgment, DEP staff determined that the installation and operation of the VFDs, combined with the prescribed spring refueling outage schedule and reductions in intake flow, the requirements to perform certain studies, and the provision for the subsequent BTA determination by the Commissioner, taken together as a whole, constitute BTA pursuant to § 316 (b). Thus, the BTA in the present case is not a single technology, but rather a combination of various technologies, studies, and commitments. Ex. DEP-45, p. 6; test. W. Micheletti, 2/5/09, pp. 2247-2251, 2/23/09, pp. 2827-2828; C. Nezianya, 2/6/09, pp. 2306-2307. The BTA determination reflected in the RDP is consistent with the direction of the EPA and the case law interpreting §

[14] "[I]f you suspect that there may be developments and new technologies and/or new technologies coming out that might affect a determination five years in the future, it's prudent at that point in time to write into your BTA determination as part of your Best Professional Judgment, 'I need additional information, and I'm going to use the opportunity of this five-year permitting window to get that information.'" Test. W. Micheletti, 2/5/09, p. 2257.

316 (b); Connecticut may apply a best professional judgment approach when making a BTA determination. Ex. APP-121.

Burton/CCAM failed to cite to any legal authority to support its claims that the PFD violates § 316 (b) in regard to BTA. Burton/CCAM Exceptions Nos. A.3, B ¶¶ 98 -110, C. 3, D. 3, 10. Burton/CCAM also did not cite to any evidence in the record to support its claim that the PFD or the RDP does not contain a BTA determination that is legally sufficient, factually supported, and scientifically sound. The extensive record is replete with evidence that the DEP has established a sufficient BTA, as is reflected in § 10 of the RDP. This BTA is also open to the results that will be analyzed in the Feasibility Study. Thus, the RDP does not disregard closed-cycle cooling as a part of BTA; rather, it recognizes the need for further study to ascertain whether closed-cycle cooling is a viable option and sets a specific deadline for the study to be sent to the DEP for a final determination by the Commissioner. The various technologies, operations, and studies in § 10 of the RDP, taken as a whole, sufficiently meet the BTA standard under § 316 (b) in the best professional judgment of the DEP and is supported by the record.

***D***

***Connecticut Coastal Management Act***

Burton/CCAM Exception No. D.11 alleges that the conclusions of law in the PFD regarding compliance with the Connecticut Coastal Management Act are invalid and not supported by the record. General Statutes §§ 22a-90 through 22a-112. Burton/CCAM failed, however, to provide any references to the record in support of this exception. At the hearing, Burton/CCAM presented no evidence challenging the DEP's affirmative consistency determination.

The required operation of VFDs will further enhance technologies in place to protect the marine environment in the area. Consistent with the Connecticut WQS, the RDP provides that the discharges from the MPS shall not contain chemical constituents that are harmful to human, animal, or aquatic life, or which make the receiving waters unsafe or unsuitable for fish or shellfish and their propagation or impair their palatability, or impair the waters for other uses. The RDP complies with the provisions of General Statutes § 22a-430 and Regs., Conn. State Agencies §§ 22a-430-3 and 22a-430-4, which govern the issuance of NPDES permits, and offers assurances to protect the waters of the state from pollution.

The applicant has fully complied with the DEP's consistency review. "[N]othing further was required of [DNC]...the documents that the Department felt were necessary to do that [consistency] review had...been submitted...." Test. J. Kulowiec, 1/30/09, p. 2037. The DEP included express language in the RDP confirming that the requirements of the Act have been satisfied: "This permitted discharge is consistent with the applicable goals and policies of the Connecticut Coastal Management Act (section 22a-92 of the Connecticut General Statutes)." Ex. APP-131 § 1 (J).

The RDP contains terms and conditions that will assure that the continued operation of the MPS under a renewed NPDES permit will not adversely impact Connecticut's coastal resources. The RDP, taken as a whole, complies with the policies and goals of the Act, which include: "To insure that the development, preservation or use of the land and water resources of the coastal area proceeds in a manner consistent with the capability of the land and water resources to support development, preservation or use without significantly disrupting either the natural environment or sound economic growth[.]" General Statutes § 22a-92 (a) (1).

The language of the statute demonstrates that the Connecticut legislature recognized a need to balance coastal conservation with appropriate economic development. The language does not have as a policy goal that coastal conservation is reached without considering the economic costs involved. The RDP is consistent with the Act's applicable goals and policies, assuring that the uses of the coastal resources in this area as authorized by the NPDES does not upset the natural environment in this coastal area while recognizing the significant importance of the operation of the MPS in Connecticut's economy and infrastructure.

Burton/CCAM's exception simply states its disagreement with the hearing officer's conclusion. It fails to cite any evidence or judicial authority to support a claimed error on the part of the hearing officer and the DEP staff regarding compliance of the RDP with the Connecticut Coastal Management Act.

***E***

***DEP Rules of Practice***

In addition to failing to cite any evidence in the record in support of its claims, several of Burton/CCAM's exceptions ignore certain requirements of the DEP Rules of Practice. Regs., Conn. State Agencies § 22a-3a-6 (y) (3) (A), provides in relevant part: "[A]ny party or intervenor may file with the Commissioner exceptions [to the Proposed Final Decision]. Exceptions shall state *with particularity* the party's or intervenor's objections to the proposed final decision, *and may not raise legal issues or… factual issues which could have been, but were not raised at the hearing*." (Emphasis added.) Burton/CCAM's exceptions either fail to state with particularity its objections to the PFD or raise legal issues or factual issues which could have been, but were not raised at the hearing. Several exceptions also raise issues that

were outside the scope of this proceeding. These failures by Burton/CCAM to comply with the Rules of Practice prevent a more thorough consideration of these exceptions, not just because of the violation of the Rules but because this infringement has resulted in an inability to better analyze the exceptions' substance.

*1*

***Burton/CCAM Failed to State Exceptions with Particularity***

Section 22a-3a-6 (y) (3) (A) requires that an intervening party state its objections to the proposed final decision with "particularity." "'Particularity' is defined in pertinent part as 'a minute detail,' 'an individual characteristic,' 'the quality or state of being particular as distinguished from universal' and 'attentiveness to detail.'" *Pagett v. Westport Precision, Inc.*, 82 Conn. App. 526, 537 (2004) (citing Webster's Ninth New Collegiate Dictionary (1988)).[15] A general disapproval of certain aspects of the proposed final decision is not acceptable.

A number of Burton/CCAM's exceptions do not comply with this particularity requirement. For example, Burton/CCAM alleges in its specific exceptions to findings of fact in the PFD that "[t]his paragraph lacks a factual basis in the record," Exceptions No. B ¶61; and claims that another finding is: "[p]atently false and not supported by the record," Exceptions No. B ¶88; and "[t]his paragraph is patently false," Exceptions No. B ¶97. Nonspecific or unsupported claims, including bias and insufficient evidence, as well as alleged procedural errors, do not meet this requirement of the DEP Rules of Practice. See also Exceptions Nos. A. 2, 4, 5, B ¶¶29, 32, 34, 49, 50, 51, 62, 66, 91-96, C. 2, 4, 5, D. 1, 2, 4, 8.

[15] See *Vitti v. Allstate Ins. Co.*, 245 Conn. 169, 178 (1998) ("'In the absence of other statutory [or regulatory] guidance, we may appropriately look to the meaning of the words as commonly expressed in the law and in dictionaries.'") (bracket in original; citing *State v. Woods*, 234 Conn. 301, 309 (1995)).

Burton/CCAM also did not state the basis for some of its allegations and did not provide any evidence at the hearing to support its post-hearing claims. For example, Burton/CCAM asserts that the hearing officer's finding that the thermal plume created by the discharge from the MPS is rapidly dispersed and assimilated by the strong water currents of Long Island Sound "is not supported by the record." Burton/CCAM Exceptions No. B ¶41. The hearing officer cites many portions of the record to support this conclusion, including the testimony of expert and fact witnesses offered by DEP and DNC as well as documentary evidence. See PFD ¶¶ 31, 41. A DNC witness testified that in his expert opinion "one of the strengths of the Millstone site is that it has this very effective mixing of the thermal discharge because of the tidal currents and dynamic nature of the environment." This expert also testified that the thermal plume "progresses out as a surface-oriented plume, and as it encounters the rapid tidal movements in the channel, it rapidly mixes and the temperature decreases very rapidly." Test. C. Coutant, 1/22/09, pp. 1709, 1716. Burton/CCAM fails to cite any contrary evidence.

In the PFD, the hearing officer has supported each finding of fact and conclusion of law with a specific citation to the record and has established a rational connection between the facts found and the conclusions made. Burton/CCAM has provided no references to the record to support its exceptions and has therefore failed to rebut these findings and conclusions. The consequence of failing to comply with the requirement of particularity is consistent with judicial precedent holding that claims that are inadequately briefed are deemed abandoned. See *Taylor v. Mucci*, 288 Conn. 379, 384 n.4 (2008) ("We repeatedly have stated that [w]e are not required to review issues that have been improperly presented to this court through an inadequate brief.... Analysis, rather than mere abstract assertion, is required in order to avoid abandoning an issue....") (internal citations and quotation marks omitted; modification in original).

*2*

***Burton/CCAM's Exceptions Address Issues That Could Have Been, But Were Not, Raised at the Hearing***

Section 22a-3a-6 (y) (3) (A) of the Regulations of Connecticut State Agencies also provides that a party may not raise legal or factual issues which could have been, but were not raised at the hearing. Many of Burton/CCAM's exceptions violate this rule.

For example, Burton/CCAM alleges that annual refueling outages to avoid water usage during winter flounder larvae migration could be regulated by the DEP. Exceptions No. B ¶¶ 43, 44. Burton/CCAM did not raise this issue at the hearing and did not offer any evidence or cite any authority to support this claim, even when there was testimony at the hearing about the timing of refueling outages. See, e.g., test. R. MacManus, 1/6/09, pp. 95-107. Similarly, Burton/CCAM did not address RDP's compliance with the Connecticut Coastal Management Act at the hearing, but raises this issue, albeit incompletely, in its exceptions: "Conclusions of law with regard to compliance with the Connecticut Coastal Management Act are invalid and not supported by the record." Burton/CCAM Exceptions No. D. 11. Finally, although Ms. Burton cross-examined a Millstone biologist over the course of three days during the hearing, Burton/CCAM did not raise the claim that the winter flounder spawning season is longer than April 4 to May 14 until it filed its exceptions. Burton/CCAM Exceptions No. B ¶¶ 53, 85.

New legal or factual issues that could have been raised at the hearing cannot now be raised as exceptions. These issues raised for the first time in Burton/CCAM's exceptions do not comply with § 22a-3a-6 (y) (3) (A) of the Rules of Practice, and will therefore not be addressed substantively herein.

***Burton/CCAM's Exceptions Address Issues That Were Wholly Outside the Scope of the Proceeding***

Section 22a-3a-6 (d) (2) provides, "In addition to any other powers provided by law, the hearing officer shall have the power to: (A) Determine the scope of the hearing[.]" Several of Burton/CCAM's exceptions raise issues that were conclusively determined to be outside the scope of this proceeding and the hearing. Several examples follow.

Certain Burton/CCAM exceptions assert that the PFD and the RDP are the result of "[a] pattern of years of cronyism, collusion and corruption...." Burton/CCAM Exceptions Nos. A.6, 7, C. 6, 7. This issue was expressly excluded from the scope of this proceeding by the hearing officer on numerous occasions, including during the adjudicatory hearing itself. See *Ruling on Notice of Intervention/Notice Regarding Pre-Hearing Schedule*, December 20, 2006 (affirmed by the hearing officer in a January 9, 2007 ruling denying Burton/CCAM's motion for reconsideration, *Ruling:...Motion for Reconsideration....)* See also *Notice Regarding Burton Exhibits*, November 20, 2008 (confirming exclusion of exhibits concerning collusion, cronyism, and corruption); *Ruling: Denial of Burton Petition to be Designated a Party to these Proceedings*, December 4, 2008 (stating once more that allegations that the application is the result of collusion, cronyism, or corruption are irrelevant and may not be raised as a subject of this proceeding).

Burton/CCAM also claims that the permit allows the release of radioactive waste into Niantic Bay and Long Island Sound because it regulates the application of chemicals and processes used to treat radioactive waste. "The [RDP] explicitly concerns itself with collection, treatment, regulation and discharge of radioactive waste." Burton/CCAM Exceptions Nos. B ¶33

and D. 5. As determined by the hearing officer prior to and thorough the hearing process, the following subject was outside the scope of the hearing process: "Any issues related to radiation, radioactivity, radioactive pollution or anything related to radiological discharges or alleged radioactive pollution from [the MPS] or any other nuclear power plant." *Ruling Regarding Burton Exhibits*, November 20, 2008.

Federal law vests in the federal government exclusive regulatory authority over radiological safety and radiological discharges from nuclear power plants. "[T]he Federal Government maintains complete control of the safety and 'nuclear' aspect of energy generation[.]" *Pacific Gas & Electric Co. v. State Energy Resources Conservation & Development Commission*, 461 U.S. 190, 212 (1983). Congress, through the Atomic Energy Act, gave the Atomic Energy Commission (now the Nuclear Regulatory Commission) "exclusive jurisdiction to license the transfer, delivery, receipt, acquisition, possession, and use of nuclear materials" and "[u]pon these subjects, no role was left for the States." Id. at 207. The federal courts have held consistently that the discharge of radiological materials is preempted from state regulation. See *Northern States Power Co. v. Minnesota*, 447 F.2d 1143, 1154 (8th Cir. 1971), *aff'd*, 405 U.S. 1035 (1972) ("[W]e hold that the federal government has exclusive authority under the doctrine of pre-emption to regulate the construction and operation of nuclear power plants, which necessarily includes regulation of the levels of radioactive effluents discharged from the plant.").

The RDP requires that the annual monitoring reports that DNC files with the Nuclear Regulatory Commission also be submitted to the DEP Bureau of Air Management, Radiation Control Division. Exs. APP-13 p. 4, 131 § 4 (G); test. C. Taylor, 1/8/09, p. 628; J. Kulowiec,

1/23/09, pp. 1926-1927. The DEP does not, however, regulate the release of radioactive waste and does not regulate the application of chemicals and chemical processes used to treat radioactive waste as Burton/CCAM claims in its exception. The RDP contains no provisions that would regulate radioactive discharges.

Burton/CCAM also takes exception to the omission of the following in a finding of fact: "installation of cooling towers would virtually eliminate entrainment...." Exceptions No. B. ¶85. The hearing officer directed that Burton/CCAM had to first establish a prima facie case of "unreasonable pollution" under General Statutes § 22a-19 (a) before it could assert that there were feasible and prudent alternatives such as cooling towers associated with closed-cycle cooling under § 22a-19 (b). Because Burton/CCAM failed to make its prima facie case, the hearing officer ruled that the hearing would not be reconvened to consider closed-cycle cooling or any other alternatives. This issue was therefore outside the scope of this proceeding and is not a proper subject for exceptions. See *Ruling: Prima Facie Case of Unreasonable Pollution/Alternatives Analysis*, July 2, 2009.

## *V*

### *Applicant's Exceptions to the Proposed Final Decision*

DNC has raised six exceptions: two address typographical errors in the PFD and four seek to "maximize consistency with the facts in the record and the language of the RDP." Applicant's Exceptions to Proposed Final Decision, Introduction. The record supports these exceptions, and thus, they will be incorporated into the final decision.

1. PFD ¶40 states: "[A]ll discharges are consolidated in underground collection tunnels constructed for Unit 2 and Unit 3...." DNC notes that the term "all discharges" is not supported by the RDP and cited testimony that confirmed that although the majority of

discharges are consolidated in these collection tunnels, some discharges are not. See Test. R. MacManus, 1/6/09, pp. 77-78; see also Ex. DEP-38 p. 5. Paragraph 58 of the PFD also identifies discharges that are not consolidated in the underground collection tunnels. Accordingly, ¶40 is revised: "The majority of the discharges are consolidated...."

2. PFD ¶47 cites C. Coutant's January 22, 2009 testimony. As DNC correctly notes, this testimony occurred on January 15, 2009. This citation will be changed.

3. PFD ¶53 identifies the period of the spring spawning season of the winter flounder as April 4 to May 15. The dates listed in the Stipulation and elsewhere in the PFD are April 4 to May 14. This typographical error will be corrected.

4. PFD ¶63 provides that "[t]o assure compliance with effluent limitations, the RDP requires that DNC conduct chronic toxicity testing four times per year for the discharge from the quarry cuts into Long Island Sound." According to the RDP, DNC is required to conduct acute toxicity testing under § 6 (B) in addition to chronic toxicity testing under § 7 four times per year. Test. J. Kulowiec, 1/30/09, p. 2073. Therefore, the following revision will be made: "To assure compliance with effluent limitations, the RDP requires that DNC conduct acute and chronic testing four times per year...."

5. PFD ¶69 states: "The RDP replaces current required quarterly acute *and chronic* toxicity testing for each of the discharges from Unit 2 and Unit 3 *with a chronic test* for the combined discharge...." (Emphasis added.) The record shows that the current permit requirement of *acute* toxicity testing is being replaced with the requirement of *acute and chronic* toxicity testing. Test. J. Kulowiec, 1/30/09, p. 2074; see also RDP §§ 6 (B),7. Therefore, PFD ¶69 will be revised to state that the RDP replaces required current quarterly acute toxicity testing with quarterly acute and chronic toxicity testing.

6. PFD ¶90 says: "The RDP also prohibits the discharge from increasing the temperature of the receiving waters by more than 83 degrees F...." The RDP requires that "the temperature of any discharge shall not increase the temperature of the receiving waters *above* 83 degrees F...." RDP § 5, Table A, Remark (3). (Emphasis added.) Other provisions of the PFD discussing temperature limits are consistent with the RDP. See PFD ¶¶82, 94. PFD ¶ 90 will be revised to correctly reflect that "[t]he RDP also prohibits the discharge from increasing the temperature of the receiving waters above 83 degrees F...."

## *VI*

## *Conclusion*

"[A] court must be satisfied from the record that 'the agency ... examine[d] the relevant data and articulate[d] a satisfactory explanation for its action.' ... Further, the agency's decision must reveal 'a rational connection between the facts found and the choice made.'" *Islander East Pipeline Co., LLC v. McCarthy*, 525 F.3d 141, 151 (2d Cir. 2008) (second and third brackets in original; internal citations omitted).

The preponderance of the substantial evidence established by the consistent testimony of credible expert witnesses and the documents in the record of this proceeding supports the hearing officer's proposed final decision. The record shows that: the discharge to be authorized by a renewed NPDES permit will not cause pollution to the waters of the state, General Statutes § 22a-430 (b) (A); any systems to treat certain discharges provided for in the RDP will protect the waters of the state from pollution, § 22a-430 (b) (C); and the procedures and criteria of Regs., Conn. State Agencies §§ 22a-430-3 and 22a-430-4 have been satisfied. The RDP is also consistent with §§ 316 (a) and 316 (b) of the Clean Water Act, 33 U.S.C. §§ 1326 (a) and 1326 (b).

The requirements for the thermal discharges from the MPS are consistent with the WQS and are reflected directly in the RDP. The thermal component of the discharge will assure the protection and propagation of a balanced, indigenous population of fish, shellfish, and wildlife in the receiving waters near the MPS in compliance with § 316 (a). The BTA conditions under § 316 (b), developed on a best professional judgment basis by the DEP, will assure that the cooling water intake structures will reflect the BTA for minimizing adverse environmental impacts.

Finally, the substantial evidence demonstrates that the use of coastal water resources is consistent with all the applicable goals and policies of the Connecticut Coastal Management Act, General Statutes §§ 22a-90 through 22a-112. The RDP contains terms and conditions that will assure that the continued operation of the MPS under a renewed NPDES permit will not adversely impact Connecticut's coastal resources.

I therefore accept the proposed final decision except as expressly modified. (See Attachment A.) I also adopt the hearing officer's recommendation to issue the Revised Draft Permit to the applicant DNC.

Susan Frechette

Susan Frechette, Deputy Commissioner

August 30, 2010

Date

# *ATTACHMENT A*

## REVISIONS TO THE PROPOSED FINAL DECISION*

1. PFD ¶40: "The majority of the discharges are consolidated in underground collection tunnels constructed for Unit 2 and Unit 3 that direct the waters to the on-site quarry and then to the main discharge from the quarry cuts into Long Island Sound; discharges also flow into Niantic Bay and Jordan Cove."

2. PFD ¶63: "To assure compliance with effluent limitations, the RDP requires that DNC conduct acute and chronic testing four times per year for the discharge from the quarry cuts into Long Island Sound."

3. PFD ¶69: "The RDP replaces current required quarterly acute toxicity testing for each of the discharges from Unit 2 and Unit 3 with required quarterly acute and chronic toxicity testing for the combined discharge that enters Long Island Sound."

4. PFD ¶90: "The RDP also prohibits the discharge from increasing the temperature of the receiving waters above 83 degrees F, or, in any case, from raising the temperature of the receiving waters by more than 4 degrees outside the mixing zone."

5. Typographical corrections

    a. PFD ¶47 citation: (…C. Coutant, 1/15/09, pp. 1730-1731.)

    b. PFD ¶53: "Pursuant to the Stipulation …(2)…to reduce the intake of cooling water during the spring spawning season (April 4 to May 14) for winter flounder…."

***Revised 8.31.10 to remove brackets in #s 2 and 4.***

***SERVICE LIST***

*In the Matter of Millstone Power Station*
*Application No. 199701876*

| PARTY | REPRESENTED BY |
|---|---|
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