

Massachusetts Water Resource Authority
Deer Island Treatment Plant
190 Tafts Avenue, PO Box 100
Winthrop, MA 02152

July 31, 2019

Maryalice Fischer
Certification Program Director
Low Impact Hydropower Institute

Dear Maryalice:

Please find enclosed the Low Impact Hydropower Institute recertification application for the Deer Island Hydro Project. As we discussed, I believe the Deer Island Hydro Project qualifies as a “very low impact” facility because we satisfy the “Not Applicable or De Minimis Effect” standard for all eight criteria. As a “very low impact” facility, MWRA hopes to be rewarded in the form of a longer term (10-year) LIHI Certificate, reduced certification review costs, and reduced annual fees.

Please call me at (617) 660-7761 if you have any questions.

Sincerely,

A handwritten signature in red ink that reads "Robert Huang". The signature is written in a cursive, flowing style.

Robert Huang
Program Manager, Energy Management

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Introduction, Facility Description, Overview Map(S)/Image(S), Description of Zones of Effect

Table B-1.1. Facility Information.

Item	Information Requested	Response (include references to further details)
Name of the Facility	Facility name (use FERC project name or other legal name)	Deer Island Hydro Project
Location	River name (USGS proper name)	The Deer Island Hydro Project is a conduit facility that is part of a Deer Island Wastewater Treatment Plant. It is not on a river. See Attachment A.
	Watershed name (select region, click on the area of interest until the 8-digit HUC number appears. Then identify watershed name and HUC-8 number from the map at: https://water.usgs.gov/wsc/map_index.html)	01090001 - Charles
	Nearest town(s), county(ies), and state(s) to dam	City of Winthrop, Suffolk County, Massachusetts
	River mile of dam	The Deer Island Hydro Project is a conduit facility that is part of a waste water treatment plant. It is not on a river.
	Geographic latitude of dam	42° 21' 15"
	Geographic longitude of dam	70° 57' 26"
Facility Owner	Application contact names (Complete the Contact Form in Section B-4 also):	Robert Huang, MWRA
	Facility owner company and authorized owner representative name. For recertifications: If ownership has changed since last certification, provide the date of the change.	The hydropower facility is owned and operated by the Massachusetts Water Resources Authority (MWRA). The MWRA is a public instrumentality and a Commonwealth of Massachusetts authority, charged with providing water and sewer services. Robert Huang (Program Manager, Energy Management) is authorized to represent MWRA in the LIHI Certification process.
	FERC licensee company name (if different from owner)	Deer Island Hydro Project

Item	Information Requested	Response (include references to further details)
Regulatory Status	FERC Project Number (e.g., P-xxxxx), issuance and expiration dates, or date of exemption	FERC Conduit Exemption #11412 was issued on November 9, 1993. See attached FERC order granting exemption (See Attachment B)
	FERC license type (major, minor, exemption) or special classification (e.g., "qualified conduit", "non-jurisdictional")	FERC Conduit Exemption #11412 was issued on November 9, 1993. See attached FERC order granting exemption (See Attachment B)
	Water Quality Certificate identifier, issuance date, and issuing agency name. Include information on amendments.	Water Quality Certification was not required since it is a conduit hydropower facility within a wastewater treatment system.
	Hyperlinks to key electronic records on FERC e-library website or other publicly accessible data repositories ¹	http://elibrary.ferc.gov Docket No. P-11412-000
Powerhouse	Date of initial operation (past or future for pre-operational applications)	The Deer Island Hydro Project was brought online in 2001.
	Total installed capacity (MW) For recertifications: Indicate if installed capacity has changed since last certification	The installed capacity is 2,200 kW and is unchanged since the last certification.
	Average annual generation (MWh) and period of record used For recertifications: Indicate if average annual generation has changed since last certification	The average annual generation is 5 million kWh and is unchanged since the last certification.
	Mode of operation (run-of-river, peaking, pulsing, seasonal storage, diversion, etc.) For recertifications: Indicate if mode of operation has changed since last certification	The Deer Island Hydro Project harnesses energy continuously from treated wastewater effluent as it drops from one elevation (the Deer Island Treatment Plant's disinfection basin) to a lower one (outfall shaft). The mode of operation is unchanged since the last certification. See Attachment A for a full description.
	Number, type, and size of turbines, including maximum and minimum hydraulic capacity of each unit	The Deer Island Hydro Project includes two bevel-gear-bulb full-Kaplan turbines rated at 1,100 kW each and a design capacity of 320 million gallons per day each.

¹ For example, the FERC license or exemption, recent FERC Orders, Water Quality Certificates, Endangered Species Act documents, Special Use Permits from the U.S. Forest Service, 3rd-party agreements about water or land management, grants of right-of-way, U.S. Army Corps of Engineers permits, and other regulatory documents. If extensive, the list of hyperlinks can be provided separately in the application.

Item	Information Requested	Response (include references to further details)
	Trashrack clear spacing (inches), for each trashrack	Not applicable Removal of debris takes place much further upstream at the wastewater treatment plant. See Attachment A.
	Dates and types of major equipment upgrades	Turbines are overhauled and refurbished roughly every 5 years. Most recently, turbine number 1 refurbishment was completed in 2018. Turbine 2 is currently being refurbished.
	Dates, purpose, and type of any recent operational changes	None since last certification.
	Plans, authorization, and regulatory activities for any facility upgrades or license or exemption amendments	FERC inspects the facility periodically. See the most recent inspection report in Attachment C.
Dam or Diversion	Date of original construction and description and dates of subsequent dam or diversion structure modifications	Not applicable
	Dam or diversion structure height including separately, the height of any flashboards, inflatable dams, etc.	Not applicable
	Spillway elevation and hydraulic capacity	Not applicable
	Tailwater elevation (provide normal range if available)	Not applicable
	Length and type of all penstocks and water conveyance structures between the impoundment and powerhouse	Not applicable
	Dates and types of major infrastructure changes	Not applicable
	Designated facility purposes (e.g., power, navigation, flood control, water supply, etc.)	Not applicable
	Source water	Not applicable
	Receiving water and location of discharge	Not applicable
Conduit	Date of conduit construction and primary purpose of conduit	Deer Island Hydro project was constructed in 2001 to supply renewable power to the Deer Island Wastewater Treatment Plant.
Impoundment and Watershed	Authorized maximum and minimum water surface elevations For recertifications: Indicate if these values have changed since last certification	Not applicable

Item	Information Requested	Response (include references to further details)
	Normal operating elevations and normal fluctuation range For recertifications: Indicate if these values have changed since last certification	Not applicable
	Gross storage volume and surface area at full pool For recertifications: Indicate if these values have changed since last certification	Not applicable
	Usable storage volume and surface area For recertifications: Indicate if these values have changed since last certification	Not applicable
	Describe requirements related to impoundment inflow, outflow, up/down ramping and refill rate restrictions.	Not applicable
	Upstream dams by name, ownership and river mile. If FERC licensed or exempt, please provide FERC Project number of these dams. Indicate which upstream dams have downstream fish passage.	Not applicable
	Downstream dams by name, ownership, river mile and FERC number if FERC licensed or exempt. Indicate which downstream dams have upstream fish passage	Not applicable
	Operating agreements with upstream or downstream facilities that affect water availability and facility operation	Not applicable
	Area of land (acres) and area of water (acres) inside FERC project boundary or under facility control.	Not applicable
Hydrologic Setting	Average annual flow at the dam, and period of record used	Not applicable
	Average monthly flows and period of record used	Not applicable
	Location and name of closest stream gauging stations above and below the facility	Not applicable
	Watershed area at the dam (in square miles). Identify if this value is prorated and provide the basis for proration.	Not applicable

Item	Information Requested	Response (include references to further details)
Designated Zones of Effect	Number of zones of effect	The Deer Island Hydro Project conduit has one zone of effect –the input and output through the hydro turbines. (See Attachment A.)
	Upstream and downstream locations by river miles	Not applicable
	Type of waterbody (river, impoundment, bypassed reach, etc.)	Not applicable
	Delimiting structures or features	Not applicable
	Designated uses by state water quality agency	Not applicable
Pre-Operational Facilities		
Expected operational date	Date generation is expected to begin	Not applicable
Dam, diversion structure or conduit modification	Description of modifications made to a pre-existing conduit, dam or diversion structure needed to accommodate facility generation. This includes installation of flashboards or raising the flashboard height. Date the modification is expected to be completed	Not applicable
Change in water flow regime	Description of any change in impoundment levels, water flows or operations required for new generation	Not applicable

Table B-1.2. Matrix of Alternative Standards Template.

Facility Name: Deer Island Hydro Project

Zone of Effect: Conduit

Criterion		<i>Alternative Standards</i>				
		<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>Plus</i>
A	Ecological Flow Regimes	x				
B	Water Quality	x				
C	Upstream Fish Passage	x				
D	Downstream Fish Passage	x				
E	Watershed and Shoreline Protection	x				
F	Threatened and Endangered Species Protection	x				
G	Cultural and Historic Resources Protection	x				
H	Recreational Resources	x				

Discussion of Each Criterion and How the Facility Meets the Selected Standard in Each Zone of Effect:

Table B-1. Information Required to Support Ecological Flows Standards.

Criterion	Standard	Instructions
A	2	<p><u>Not Applicable / De Minimis Effect:</u></p> <ul style="list-style-type: none"> In a conduit facility, identify the source waters, location of discharge points, and receiving waters for the conduit system within which the hydropower facility is located. <p><i>The Deer Island Hydro Project is a conduit hydropower facility within the Deer Island Waste Water treatment plant (see process flow diagram in Attachment A). It receives wastewater from the disinfection basin and discharges it into a shaft which further conveys wastewater to a 9.5 mile long outfall tunnel 120 feet below the surface that discharges into the deeper waters of the Massachusetts Bay.</i></p>

Table B-2. Information Required to Support Water Quality Standards.

Criterion	Standard	Instructions
B	1	<p><u>Not Applicable / De Minimis Effect:</u></p> <ul style="list-style-type: none"> Explain the rationale for why the facility does not alter water quality characteristics below, around, and above the facility. <p><i>The Deer Island Hydro Project is a conduit hydropower facility within the Deer Island Waste Water treatment plant (see process flow diagram in Attachment A). It receives wastewater from the disinfection basin and discharges it into shaft which further conveys wastewater to a 9.5 mile long outfall tunnel 120 feet below the surface that discharges into the deeper waters of the Massachusetts Bay.</i></p> <p><i>The facility does not alter the physical, chemical, or biotic water characteristics necessary to support fish and wildlife resources or human water uses (e.g., water supply or recreation). According to EPA, The Deer Island Treatment Plant NPDES permit “imposes rigorous conditions to ensure the protection of Massachusetts and Cape Cod Bays. In fact, the permit is the most comprehensive of its type ever issued for a municipal discharger. The permit includes unprecedented ambient monitoring requirements; stringent pollution prevention, and best management practice requirements; and a first-of-its-kind requirement to implement a “contingency plan,” to help ensure that any unexpected problems are dealt with swiftly.”</i></p> <p>https://www.epa.gov/npdes-permits/epas-permit-massachusetts-water-resources-authority-mwra-outfall</p>

Table B-3. Information Required to Support Upstream Fish Passage Standards.

Criterion	Standard	Instructions
C	1	<p><u>Not Applicable / De Minimis Effect:</u></p> <ul style="list-style-type: none"> Explain why the facility does not impose a barrier to upstream fish passage in the designated zone <p><i>The Deer Island Hydro Project is a conduit hydropower facility within the Deer Island Waste Water treatment plant (see process flow diagram in Attachment A). It receives wastewater from the disinfection basin and discharges it into shaft which further conveys wastewater to a 9.5 mile long outfall tunnel 120 feet below the surface that discharges into the deeper waters of the Massachusetts Bay. It does not impose a barrier to upstream fish passage.</i></p>

Table B-4. Information Required to Support Downstream Fish Passage Standards.

Criterion	Standard	Instructions
D	1	<p><u>Not Applicable / De Minimis Effect:</u></p> <ul style="list-style-type: none"> Explain why the facility does not impose a barrier to downstream fish passage in the designated zone, considering both physical obstruction and increased mortality relative to natural downstream movement (e.g., entrainment into hydropower turbines). <p><i>The Deer Island Hydro Project is a conduit hydropower facility within the Deer Island Waste Water treatment plant (see process flow diagram in Attachment A). It receives wastewater from the disinfection basin and discharges it into shaft which further conveys wastewater to a 9.5 mile long outfall tunnel 120 feet below the surface that discharges into the deeper waters of the Massachusetts Bay. It does not impose a barrier to downstream fish passage.</i></p>

Table B-5. Information Required to Support Shoreline and Watershed Protection Standards.

Criterion	Standard	Instructions
E	1	<p><u>Not Applicable / De Minimis Effect:</u></p> <ul style="list-style-type: none"> • If there are no lands with significant ecological value associated with the facility, document and justify this (e.g., describe the land use and land cover within the FERC project or facility boundary). <p><i>The Deer Island Hydro Project is located on Deer Island, which has longstanding use as a sewage disposal facility. The first treatment plant was constructed on Deer Island in the late 1800s. The current Deer Island Treatment Plant is the second largest in the world began construction in 1995 and is the centerpiece of MWRA' \$3.8 billion program to protect Boston Harbor against pollution from Metropolitan Boston's sewer systems. The plant consists of a grit facility, primary/secondary clarifiers, digesters, centrifuges, gravity thickeners, disinfection basins, a thermal power plant, storage tanks, and a cryogenic plant.</i></p> <ul style="list-style-type: none"> • Document that there have been no Shoreline Management Plans or similar protection requirements for the facility. <p><i>The Deer Island Hydro Project is a conduit hydropower facility that is not located on the shoreline.</i></p>

Table B-6. Information Required to Support Threatened and Endangered Species Standards.

Criterion	Standard	Instructions
F	1	<p><u>Not Applicable / De Minimis Effect:</u></p> <ul style="list-style-type: none"> Document that there are no listed species in the facility area. <p><i>The Deer Island Hydro Project is a conduit hydropower facility within the Deer Island Waste Water treatment plant (see process flow diagram in Attachment A). It receives wastewater from the disinfection basin and discharges it into shaft which further conveys wastewater to a 9.5 mile long outfall tunnel 120 feet below the surface that discharges into the deeper waters of the Massachusetts Bay. Deer Island has been used as a sewage disposal facility since the 1800s and there are no threatened or endangered species in the area.</i></p> <p><i>Regarding the discharge to the Massachusetts Bay, the Deer Island Wastewater Treatment Plant's NPDES permit prohibits any adverse effect on critical habitat for endangered species. Because some chemicals may have synergistic effects, the permit also requires the MWRA to periodically test the toxicity of the effluent as a whole on sensitive marine organisms, and establishes strict limits based on those tests. In addition to requiring the MWRA to monitor the discharge itself, the permit also requires the MWRA to implement the most extensive ambient monitoring program (i.e. monitoring of conditions in Massachusetts and Cape Cod Bays) for any treatment plant of its kind in the United States. This multimillion dollar program includes 43 monitoring stations which will collect data on everything from nutrients to heavy metals to algae blooms. Monitoring results will be compared with an extensive set of pre-discharge baseline data, to help assess any impact of the discharge.</i></p> <p><i>Finally, Attachment D includes letters of approval from the U.S. Department of Interior Fish and Wildlife Service, U.S. Department of Commerce's National Marine Fisheries Service, Commonwealth of Massachusetts Division of Fisheries and Wildlife's Natural Heritage and Endangered Species Program, and the Commonwealth of Massachusetts Division of Marine Fisheries.</i></p>

Table B-7. Information Required to Support Cultural and Historic Resources Standards.

Criterion	Standard	Instructions
G	1	<p><u>Not Applicable / De Minimis Effect:</u></p> <ul style="list-style-type: none"> Document that the facility construction and operation have not in the past, nor currently adversely affect any cultural or historic resources that are present on facility lands. <p><i>The Deer Island Hydro Project is a conduit hydropower facility within the Deer Island Waste Water treatment plant (see process flow diagram in Attachment A). It receives wastewater from the disinfection basin and discharges it into shaft which further conveys wastewater to a 9.5 mile long outfall tunnel 120 feet below the surface that discharges into the deeper waters of the Massachusetts Bay. Deer Island has been used as a sewage disposal facility since the 1800s. The original steam pump station built from 1894 to 1899, eligible for the National Register of Historic Places, has been restored and displayed at the administration building and training center at the new facilities.</i></p>

Table B-8. Information Required to Support Recreational Resources Standards.

Criterion	Standard	Instructions
H	1	<p><u>Not Applicable / De Minimis Effect:</u></p> <ul style="list-style-type: none"> Document that the facility does not occupy lands or waters to which public access can be granted and that the facility does not otherwise impact recreational opportunities in the facility area. <p><i>The Deer Island Hydro Project is a conduit hydropower facility within the Deer Island Waste Water treatment plant (see process flow diagram in Attachment A). It receives wastewater from the disinfection basin and discharges it into shaft which further conveys wastewater to a 9.5 mile long outfall tunnel 120 feet below the surface that discharges into the deeper waters of the Massachusetts Bay. Deer Island has been used as a sewage disposal facility since the 1800s. The current Deer Island Treatment Plant is the second largest in the world began construction in 1995 and is the centerpiece of MWRA' \$3.8 billion program to protect Boston Harbor against pollution from Metropolitan Boston's sewer systems. The plant consists of a grit facility, primary/secondary clarifiers, digesters, centrifuges, gravity thickeners, disinfection basins, a thermal power plant, storage tanks, and a cryogenic plant. Although plant tours are given to the public, the public cannot access to the facility. Surrounding the facility, there are Deer Island features five miles of public walkways and trails for walking, jogging, sightseeing, picnicking, fishing and bicycling.</i></p>

Signed Sworn Statement and Waiver Form

All applications for LIHI Certification must include the following sworn statement before they can be reviewed by LIHI:

SWORN STATEMENT

As an Authorized Representative of the Deer Island Hydro Project, the Undersigned attests that the material presented in the application is true and complete.

The Undersigned acknowledges that the primary goal of the Low Impact Hydropower Institute's certification program is public benefit, and that the LIHI Governing Board and its agents are not responsible for financial or other private consequences of its certification decisions.

The Undersigned further acknowledges that if LIHI Certification of the applying facility is granted, the LIHI Certification Mark License Agreement must be executed prior to marketing the electricity product as LIHI Certified®.


The Undersigned further agrees to hold the Low Impact Hydropower Institute, the Governing Board and its agents harmless for any decision rendered on this or other applications, from any consequences of disclosing or publishing any submitted certification application materials to the public, or on any other action pursuant to the Low Impact Hydropower Institute's certification program.

Company Name: Massachusetts Water Resource Authority

Authorized Representative:

Name: Robert Huang

Title: Program Manager, Energy Management

Authorized Signature:  _____

Date: 7/31/19

Facility and Stakeholder Contact Form

A. Applicant-related contacts

Facility Owner:	
Name and Title	Not Applicable
Company	
Phone	
Email Address	
Mailing Address	
Facility Operator (if different from Owner):	
Name and Title	Ethan Wenger, Deputy Director , Deer Island Wastewater Treatment Plant
Company	MWRA
Phone	617-660-7689
Email Address	Ethan.Wenger@mwra.com
Mailing Address	Deer Island Wastewater Treatment Plant, 190 Tafts Ave., Winthrop, MA 02152
Consulting Firm / Agent for LIHI Program (if different from above):	
Name and Title	Not Applicable
Company	
Phone	
Email Address	
Mailing Address	
Compliance Contact (responsible for LIHI Program requirements):	
Name and Title	Robert Huang, Program Manager, Energy Management
Company	MWRA
Phone	617-660-7761
Email Address	Robert.Huang@mwra.com
Mailing Address	Deer Island Wastewater Treatment Plant, 190 Tafts Ave., Winthrop, MA 02152
Party responsible for accounts payable:	
Name and Title	Toni Lamonica, Financial Analyst
Company	MWRA
Phone	617-660-7615
Email Address	Toni.Lamonica@mwra.com
Mailing Address	Deer Island Wastewater Treatment Plant, 190 Tafts Ave., Winthrop, MA 02152

B. Current and relevant state, federal, and tribal resource agency contacts with knowledge of the facility (copy and repeat the following table as needed).

Agency Contact (Check areas of responsibility: Flows <input checked="" type="checkbox"/> , Water Quality <input type="checkbox"/> , Fish/Wildlife Resources <input type="checkbox"/> , Watersheds <input type="checkbox"/> , T/E Spp. <input type="checkbox"/> , Cultural/Historic Resources <input type="checkbox"/> , Recreation <input 2"="" type="checkbox/>):</td> </tr> <tr> <td>Agency Name</td> <td>FERC</td> </tr> <tr> <td>Name and Title</td> <td>Noel Aglubat, Engineer</td> </tr> <tr> <td>Phone</td> <td>(212) 273-5907</td> </tr> <tr> <td>Email address</td> <td>Noel.Aglubat@ferc.com</td> </tr> <tr> <td>Mailing Address</td> <td>FERC, Office of Energy Projects, Division of Dam Safety and Inspection – New York Regional Office, 19 west 34<sup>th</sup> Street, Suite 400, New York, NY 10001</td> </tr> <tr> <td colspan="/> Agency Contact (Check areas of responsibility: Flows <input type="checkbox"/> , Water Quality <input type="checkbox"/> , Fish/Wildlife Resources <input type="checkbox"/> , Watersheds <input type="checkbox"/> , T/E Spp. <input type="checkbox"/> , Cultural/Historic Resources <input type="checkbox"/> , Recreation <input 2"="" type="checkbox/>):</td> </tr> <tr> <td>Agency Name</td> <td></td> </tr> <tr> <td>Name and Title</td> <td></td> </tr> <tr> <td>Phone</td> <td></td> </tr> <tr> <td>Email address</td> <td></td> </tr> <tr> <td>Mailing Address</td> <td></td> </tr> <tr> <td colspan="/> Agency Contact (Check areas of responsibility: Flows <input type="checkbox"/> , Water Quality <input type="checkbox"/> , Fish/Wildlife Resources <input type="checkbox"/> , Watersheds <input type="checkbox"/> , T/E Spp. <input type="checkbox"/> , Cultural/Historic Resources <input type="checkbox"/> , Recreation <input 2"="" type="checkbox/>):</td> </tr> <tr> <td>Agency Name</td> <td></td> </tr> <tr> <td>Name and Title</td> <td></td> </tr> <tr> <td>Phone</td> <td></td> </tr> <tr> <td>Email address</td> <td></td> </tr> <tr> <td>Mailing Address</td> <td></td> </tr> <tr> <td colspan="/> Agency Contact (Check areas of responsibility: Flows <input type="checkbox"/> , Water Quality <input type="checkbox"/> , Fish/Wildlife Resources <input type="checkbox"/> , Watersheds <input type="checkbox"/> , T/E Spp. <input type="checkbox"/> , Cultural/Historic Resources <input type="checkbox"/> , Recreation <input 2"="" type="checkbox/>):</td> </tr> <tr> <td>Agency Name</td> <td></td> </tr> <tr> <td>Name and Title</td> <td></td> </tr> <tr> <td>Phone</td> <td></td> </tr> <tr> <td>Email address</td> <td></td> </tr> <tr> <td>Mailing Address</td> <td></td> </tr> <tr> <td colspan="/> Agency Contact (Check areas of responsibility: Flows <input type="checkbox"/> , Water Quality <input type="checkbox"/> , Fish/Wildlife Resources <input type="checkbox"/> , Watersheds <input type="checkbox"/> , T/E Spp. <input type="checkbox"/> , Cultural/Historic Resources <input type="checkbox"/> , Recreation <input 485="" 511="" 918="" 934"="" data-label="Page-Footer" type="checkbox/>):</td> </tr> <tr> <td>Agency Name</td> <td></td> </tr> <tr> <td>Name and Title</td> <td></td> </tr> <tr> <td>Phone</td> <td></td> </tr> <tr> <td>Email address</td> <td></td> </tr> <tr> <td>Mailing Address</td> <td></td> </tr> </table> </div> <div data-bbox="/> <p>15</p>	
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C. Current stakeholder contacts that are actively engaged with the facility (copy and repeat the following table as needed).

Stakeholder Contact (Check areas of interest: Flows __, Water Quality __, Fish/Wildlife Resources __, Watersheds __, T/E Spp. __, Cultural/Historic Resources __, Recreation __):	
Stakeholder Organization	None were identified
Name and Title	
Phone	
Email address	
Mailing Address	
Stakeholder Contact (Check areas of interest: Flows __, Water Quality __, Fish/Wildlife Resources __, Watersheds __, T/E Spp. __, Cultural/Historic Resources __, Recreation __):	
Stakeholder Organization	
Name and Title	
Phone	
Email address	
Mailing Address	
Stakeholder Contact (Check areas of interest: Flows __, Water Quality __, Fish/Wildlife Resources __, Watersheds __, T/E Spp. __, Cultural/Historic Resources __, Recreation __):	
Stakeholder Organization	
Name and Title	
Phone	
Email address	
Mailing Address	
Stakeholder Contact (Check areas of interest: Flows __, Water Quality __, Fish/Wildlife Resources __, Watersheds __, T/E Spp. __, Cultural/Historic Resources __, Recreation __):	
Stakeholder Organization	
Name and Title	
Phone	
Email address	
Mailing Address	

Appendices/Attachments

Attachment A: Deer Island Hydro Project Description

MWRA generates hydropower at the Deer Island Wastewater Treatment Plant. Once wastewater has undergone secondary treatment, it is disinfected and discharged into a hydropower facility that takes advantage of the flow and fall of treated wastewater. (See Figure 1 and Figure 2.) After passing through hydroelectric turbines, the effluent is conveyed to a 400 foot deep vertical shaft and then into a 9.5 mile long deep rock outfall tunnel for discharge into Massachusetts Bay. More details are provided below.

After disinfection, wastewater is discharged into Effluent Channel 1 and flow is split through two horizontal 20 feet by 18 feet intake openings and sent through rectangular concrete conduits below the disinfection basin into two hydro turbines. The intake openings decrease to 11 feet by 11 feet at the motorized intake gates located immediately upstream of the turbines. The average head available is 29 feet. The hydropower facilities include two nominal 1 MW Kaplan units each with a flow capacity of 640 million gallons per day – roughly the maximum flow through secondary treatment. Turbine runner blades and wicket gates are adjusted to meet changing power demands and changes in flow and head. (See Figure 3.)

The hydropower facility's instrumentation and control system is part of the overall wastewater treatment control system and can be operated unattended. If wastewater flow is in excess of the 640 million gallons per day capacity, the disinfected wastewater is discharged through Effluent Channel 2 directly to the outfall tunnel.

The building that houses the turbines, generators, and electrical switchgear equipment is located directly over Effluent Channel 1. The building is bordered to the north by the outfall tunnel shaft, the east by a seawall and Massachusetts Bay, on the south by disinfection basins, and on the west by secondary clarifiers.

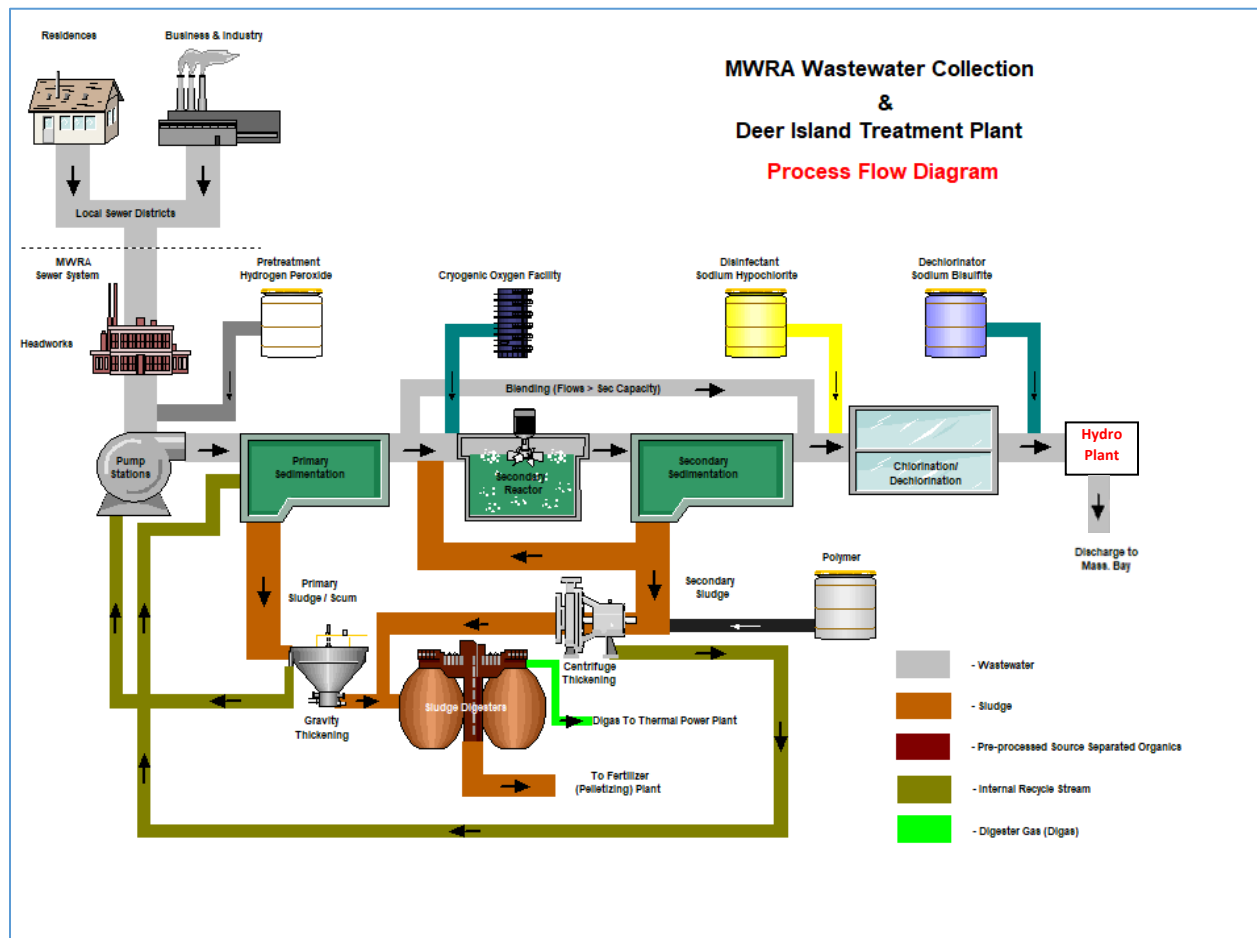


Figure 1: Deer Island Treatment Plant Process Flow Diagram (Hydro turbines use “Discharge to Mass Bay” to generate electricity)



Figure 2: View of Deer Island Treatment Plant and Location of Hydroelectric Generation

Hydro Operation					
Parameter	1	2	Total	Units	Design
Total Plant Flow, Pumping			222	MGD	1,310
Hydro Power Output	695	0	702	KW	1,100 kw/unit
Generator Speed	99.9	0.1		%	
Hydro Power Efficiency			3.16	KW/MGD	
Headwater Level	139.5	139.5		FT	Max 141.07
Tailwater Level	107.2	95.0		FT	Min 98.30
Tide	102.7			FT	
Wicket Gate Position	75.0	0.5		% Open	
Blade Position	47.4	100.1		% Open	

Turbine configuration - Bevel gear bulb, Type - Full Kaplan, 2 units rated @ 1,100 kw/unit

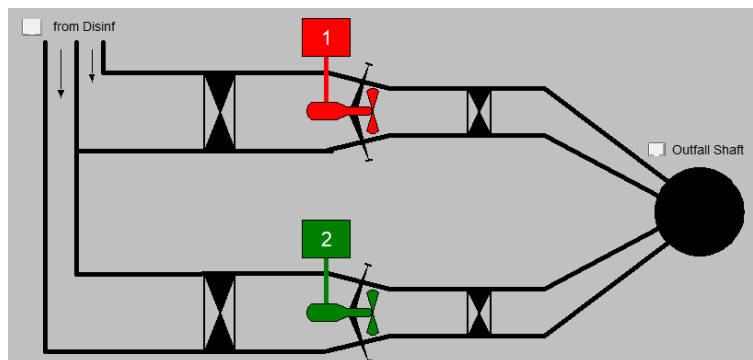


Figure 3: Operational Data on Two Turbines on July 17, 2019 and Accompanying Schematic

Attachment B: FERC Order Granting Exemption

65 FERC 162,121
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Massachusetts Water Resource
Authority

Project No. 11412-000
Massachusetts

ORDER GRANTING EXEMPTION FROM LICENSING
(CONDUIT)
Issued November 9, 1993

On May 3, 1993, Massachusetts Water Resource Authority Inc. (MWRA), filed an application to exempt the Deer Island Hydro Project from the licensing requirements set forth in Part I of the Federal Power Act. The small conduit hydropower project is described in the attached public notice. The comments of interested agencies and individuals, have been fully considered in determining whether to issue this exemption from licensing.

Article 2 of this exemption requires compliance with the terms and conditions prepared by federal or state fish and wildlife agencies to protect fish and wildlife resources. Fish and wildlife agencies commented but did not file terms and conditions for this project.

Cultural Resources

The proposed project site is located in the vicinity of the Deer Island Pumping Station and the Superintendent's House, which are eligible for listing in the National Register of Historic Places (National Register), and two potentially eligible historic period burial grounds located at the New Resthaven cemetery and Piggery Point. However, the proposed project would consist of a hydroelectric facility constructed within the channel leading to the effluent outfall shaft, and thus it would not be expected to affect any of those properties. The Massachusetts State Historic Preservation Officer (SHPO) concurs that the project would have no effect on the significant architectural and historical characteristics of the National Register-eligible properties (letter to Marianne Connolly from Judith B. McDonough, State Historic Preservation Officer, Massachusetts Historical Commission, Boston Massachusetts, September 22, 1993).

However, the SHPO recommends that the Piggery Point burial ground be depicted on the project design plans to ensure the site would be protected from damage by construction activities. Therefore, article 401 requires the MWRA to file project design plans depicting the location of the Piggery Point burial grounds for Commission approval before beginning any project-related construction activities.

Preparation of an environmental assessment or an environmental impact statement is not required for this project

pursuant to 1380.4(a)(14) of the regulations. Nonetheless, we have considered the agency comments, the environmental information in the exemption application, and other public comments, and find that issuance of this order is not a major federal action significantly affecting the quality of the human environment.

The Director orders:

(A) The Deer Island Hydro Project is exempted from the licensing requirements of Part 1 of the Federal Power Act, subject to the attached articles. See 18 CFR section 4.94.

(B) Article 6 of this exemption is amended as follows:

Before transferring any property interests in the exempt project, the exemption holder must inform the transferee of the terms and conditions of the exemption. Within 30 days of transferring the property interests, the exemption holder must inform the Commission and the Regional Director of the identity and address of the transferee.

(C) The exemption is also subject to the following article:

Article 401. At least 90 days before commencing any project-related construction activities, the Exemptee shall file with the Commission, for approval, revised project design drawings and specifications depicting the location of the historic Piggery Point burial grounds, and describing measures that the Exemptee would implement to avoid any project-related construction activities at the historic burial grounds.

The Exemptee shall prepare the project drawings and specifications after consultation with the Massachusetts State Historic Preservation Officer (SHPO). The Exemptee shall include with the filing, copies of comments and recommendations from the SHPO and descriptions of how the SHPO's comments are accommodated by the project design drawings and specifications.

The Commission may require changes to the drawings and specifications to ensure that no project-related activities would take place at the historic Piggery Point burial grounds. No project-related construction activities shall begin until the Exemptee is notified that the requirements of this article have been fulfilled.

(D) The Exemptee shall serve copies of any Commission filing required by this order on any entity specified in this order to be consulted on matters related to that filing. Proof

3

of service on these entities must accompany the filing with the Commission.

(E) This order is issued under authority delegated to the Director and constitutes final agency action. Requests for rehearing by the Commission may be filed within 30 days of the date of issuance of this order, pursuant to 18 CFR section 385.713.

Dean L. Shumway
Director, Division of
Project Review

Public Notice of Application Accepted for Filing
(Issued August 13, 1993)

- a. Type of Application: Conduit Exemption
- b. Project No.: 11412-000
- c. Date Filed: May 3, 1993
- d. Applicant: Massachusetts Water Resource Authority
- e. Name of Project: Deer Island Hydro Project
- f. Location: On Deer Island in the Boston Harbor, Suffolk,
near Boston, Massachusetts
- g. Filed Pursuant to: Federal Power Act, 16 U.S.C. 791(a)-
825(r)
- h. Applicant Contact: Mr. Walter Armstrong
Massachusetts Water Resource Authority
Program Management Division
Charleston Navy Yard
100 First Avenue
Boston, MA 02129
(617) 242-6000
- i. FERC Contact: Ed Lee (202) 219-2809
- j. Comment Date: October 18, 1993

19931117-0300(821365)[1].txt

- k. Status of Environmental Analysis: This application is accepted for filing and is categorically excluded from the preparation of an environmental assessment.
- l. Description of Project: The proposed project consists of the following: (1) an electrical building; (2) a substation; (3) a powerhouse containing two 1,000-kw generators for a total installed capacity of 2,000 kw; (4) an intake conduit which conveys the wastewater from the disinfection facilities to the hydropower chute; and (5) appurtenant facilities. The applicant estimates that the total average annual generation would be 12,400 megawatthours.
- m. Purpose of Project: Project power would be utilized by the applicant in its water treatment facilities.
- n. This notice also consists of the following standard paragraphs: A2, A9, and B1.
- o. Available Location of Application: A copy of the application, as amended and supplemented, is available for inspection and reproduction at the Commission's Public

2

Reference and Files Maintenance Branch, located at 941 North Capitol Street, N.E., Room 3104, Washington, D.C., 20426, or by calling (202) 208-1371. A copy is also available for inspection and reproduction at Massachusetts Water Resource Authority, Charleston Navy Yard, 100 First Avenue, Boston, MA 02129 or by calling (617) 242-6000.

- a. Type of Application: Conduit Exemption
- b. Project No.: 11412-000
- c. Date Filed: May 3, 1993
- d. Applicant: Massachusetts Water Resource Authority
- e. Name of Project: Deer Island Hydro Project
- f. Location: On Deer Island in the Boston Harbor, Suffolk,
near Boston, Massachusetts
- g. Filed Pursuant to: Federal Power Act, 16 U.S.C. 791(a)-
825(r)
- h. Applicant Contact: Mr. Walter Armstrong
Massachusetts Water Resource Authority
Program Management Division
Charleston Navy Yard
100 First Avenue
Boston, MA 02129
(617) 242-6000
- i. FERC Contact: Ed Lee (202) 219-2809
- j. Comment Date: October 18, 1993
- k. Status of Environmental Analysis: This application is
accepted for filing and is categorically excluded from the
preparation of an environmental assessment.
- l. Description of Project: The proposed project consists
of the following: (1) an electrical building; (2) a
substation; (3) a powerhouse containing two 1,000-kw
generators for a total installed capacity of 2,000 kw; (4)
an intake conduit which conveys the wastewater from the
disinfection facilities to the hydropower chute; and (5)
appurtenant facilities. The applicant estimates that the
total average annual generation would be 12,400
megawatt-hours.
- m. Purpose of Project: Project power would be utilized
by the applicant in its water treatment facilities.
- n. This notice also consists of the following standard
paragraphs: A2, A9, and B1.
- o. Available Location of Application: A copy of the
application, as amended and supplemented, is available for
inspection and reproduction at the Commission's Public
Reference and Files Maintenance Branch, located at 941 North

19930819-0261(820669)[1].txt

-2-

capitol Street, N.E., Room 3104, Washington, D.C., 20426, or by calling (202) 208-1371. A copy is also available for inspection and reproduction at Massachusetts Water Resource Authority, Charleston Navy Yard, 100 First Avenue, Boston, MA 02129 or by calling (617) 242-6000.

UNITED STATES OF AMERICA 67 ferc 62,094
FEDERAL ENERGY REGULATORY COMMISSION

Massachusetts Water Resource
Authority

Project No. 11412-001
Massachusetts

ORDER APPROVING REVISED PROJECT DESIGN DRAWING

(Issued May 3, 1994)

On February 17, 1994, the Massachusetts Water Resource Authority, exemptee for the Deer Island Hydro Project, filed a revised project design drawing and specifications showing the location of the historic Piggery Point burial ground (burial ground). This filing was required by article 401 of the exemption issued November 9, 1993.¹

Article 401 requires that the exemptee file with the Commission, for approval, revised drawings showing the historic burial ground and describing measures that the exemptee would implement to avoid any project-related construction activities at the historic burial ground. It further requires that the exemptee prepare the drawings and specifications after consultation with the Massachusetts State Historic Preservation Officer (SHPO).

Consultation

The exemptee consulted with SHPO. In a letter dated January 24, 1994, SHPO states that the burial site is located in an area of the island proposed to be used as open space in the future. SHPO further states that by placing its location on the site plans, the site can be protected from damage by construction-related activities associated with the new wastewater treatment facilities.

Discussion and Conclusion

The proposed project is located in the vicinity of the Deer Island Pumping Station and the Superintendent's House, which are eligible for listing on the National Register of Historic Places (Register). The proposed project would consist of a hydroelectric facility constructed within the channel leading to the effluent outfall shaft. Construction will take place over 500 feet away from the burial ground and is not expected to affect any of the properties eligible for listing in the Register.

The exemptee has located the historic site on the design drawing. By noting the location, all construction-related

1. 65 FERC ¶ 62,121.

activities can be planned to ensure that the site is protected from damage. This filing meets the requirements of article 401 and should be approved.

The Director orders:

(A) The revised project drawing depicting the location of Piggery Point burial ground, filed on February 17, 1994 is approved and made part of the exemption.

(B) This order constitutes final agency action. Requests for rehearing by the Commission may be filed within 30 days of the date of issuance of this order, pursuant to 18 C.F.R. § 385.713.

J. Mark Robinson
Director, Division of Project
Compliance and Administration

Attachment C: Most Recent FERC Inspection Letter

FEDERAL ENERGY REGULATORY COMMISSION

Office of Energy Projects

Division of Dam Safety and Inspections – New York Regional Office

19 West 34th Street, Suite 400

New York, NY 10001

Telephone No. (212) 273-5900

Fax No. (212) 631-8124

In reply, refer to:

P-11412-MA

Deer Island Hydro Station

2017 Inspection Follow-up

August 25, 2017

Mr. Daniel O'Brien
Director, Deer Island Treatment Plant
PO Box 100
Winthrop, Massachusetts 02152

Dear Mr. O'Brien:

This letter summarizes D2SI-NYRO findings from the inspection of the Deer Island Hydro project that was performed on August 7, 2017. We thank you for courtesies extended during this inspection. The project's features and associated facilities were noted to be in good condition. No maintenance measures are being requested as a result of this inspection.

Since additional research goes into the preparation of our reports, please be advised that we may have additional comments at that time. In the interim, should you have any questions, please contact Mr. Noel Aglubat at (212) 273-5907 or by e-mail at Noel.Aglubat@ferc.gov. Your continued cooperation is appreciated.

Sincerely,

A handwritten signature in blue ink, appearing to be 'John Spain', with a long horizontal stroke extending to the right.

John Spain, P.E.
Regional Engineer

Attachment D: Letters of Approval from State and Federal Agencies

Resource Agency Consultation

Contents:

List of Agencies Contacted During FERC Consultation Process

Resource Agency Comment Letters

- USFWS
- NOAA
- EPA
- Corps of Engineers
- MADFW
- MA Division of Marine Fisheries
- MA DEP
- MA EOEA

APPENDIX 2
Attachment 1

List of Federal and State Agencies Contacted During Pre-filing Consultation

Mr. Alex Hoar, Director
U.S. Fish & Wildlife Service
Enhancement Division
1 Gateway Center
Newton Corner, MA 02158
(617) 969-5100

Ms. Kathy Middleton
Environmental Protection Assistant
National Oceanic Atmospheric Admin.
National Marine Fisheries Service
1 Blackburn Drive
Gloucester, MA 01930-2298
(508) 281-9300

Mr. Ronald Manfredonia, Chief
Water Quality Branch
U. S. Environmental Protection Agency
Mail Code: W.Q.B.
J.F.K. Building
Government Center
Boston, MA 02203
865-3400

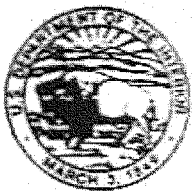
Mr. Joseph Ignazio
Planning Directorate
U.S. Army Corps of Engineers
New England Division
424 Trapelo Road
Building 114 North
Waltham, MA 02154

Mr. Wayne MacCallum, Director
Mass. Division Fisheries & Wildlife
100 Cambridge Street
Boston, MA 02202
727-3151

Mr. Phil Coates, Director,
Mass. Division of Marine Fisheries
100 Cambridge Street
Boston, MA 02202
727-3151

Mr. Brian Donahoe, Director
Division of Water Pollution Control
One Winter Street
Boston, MA 02108

Ms. Jane W. Mead, Project Review Coord.
Mass. Coastal Zone Management Office
100 Cambridge Street
Boston, MA 02202
(617) 727-9530



United States Department of the Interior

FISH AND WILDLIFE SERVICE
400 RALPH PILL MARKETPLACE
22 BRIDGE STREET
CONCORD, NEW HAMPSHIRE 03301-4901



92 MAR 25 PM 2:51

REF: Deer Island/Boston Harbor

March 12, 1992

Mr. David Reilly
Massachusetts Water Resources Authority
Charlestown Navy Yard
100 First Avenue
Boston, MA 02129

Dear Mr. Reilly:

We have reviewed your letter dated February 13, 1992, which outlined the Massachusetts Water Resources Authority's proposal to install hydroelectric turbines at the Secondary Wastewater Treatment Facility at the Boston Harbor Project on Deer Island.

The proposed hydroelectric facility does not impact any fish and wildlife resources, and we do not object to the issuance of a Conduit Exemption by the Federal Energy Regulatory Commission.

Thank you for this opportunity to comment. If you have any questions, please contact John Warner of this office at (603) 225-1411.

Sincerely yours,

Gordon E. Beckett
Supervisor
New England Field Offices



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Northeast Region
One Blackburn Drive
Gloucester, MA 01930

April 8, 1993

RECEIVED

APR 13 1993
793040769

EHP - DIF
DOCUMENT CONTROL

Mr. David Reilly
Program Management Division
Massachusetts Water Resources Authority
Charlestown Navy Yard
100 First Avenue
Boston, Massachusetts 02129

RESOURCE MANAGEMENT

P9304072

93 APR 12 AM 1:39

RE: FERC Review of Hydropower Facilities at Deer Island

Dear Mr. Reilly:

Thank you for your letter dated March 1, 1993 regarding the proposed hydropower plant at the Deer Island Treatment Plant. You have adequately addressed my concerns that were raised during my phone conversation with Michael Hankard.

If you are in need of further consultation in the future please feel free to contact me at (508) 281-9116.

Sincerely,

Mary Colligan
Resource Management Specialist





MASSACHUSETTS WATER RESOURCES AUTHORITY

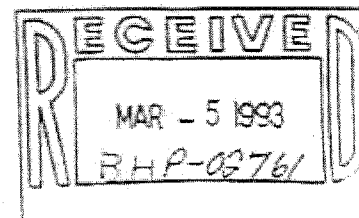
Charlestown Navy Yard
100 First Avenue
Boston, Massachusetts 02129

Telephone: (617) 242-6000
Facsimile: (617) 241-6070

March 1, 1993

Ms. Mary Colligan
Resource Management Specialist
National Oceanic & Atmospheric Administration
National Marine Fisheries Service
1 Blackburn Drive
Gloucester, MA 01930-2298

BHP# 02761



RE: Federal Energy Regulatory Commission Review
Hydropower Facilities at Deer Island - Boston Harbor Project

Dear Ms. Colligan:

This letter provides a response to your questions about the effect on temperature and dissolved oxygen concentration of the Deer Island Treatment Plant effluent due to the operation of the proposed hydropower plant. These questions were raised during a February 11, 1993 conversation with Michael Hankard of the Boston Harbor Project's Construction Manager.

The only potential thermal input to the wastewater treatment plant effluent resulting from the operation of the hydropower plant would be a minor frictional heat load from the turbine. Based on an assumed turbine efficiency of 80% (and assuming all of this loss is converted to heat), 2 MW of combined generating power, and a minimum plant flow rate of 460 cfs, this heat input from friction was determined to have no measurable effect on the turbine discharge.

Operation of the turbine will have no impact on the dissolved oxygen concentration of the effluent between the inlets and outlets of the turbines.

I hope that this information sufficiently addresses your questions. If you require any further information please contact Michael Hankard at (617) 539-7734.

Sincerely yours,

Mr. David Reilly
Mr. David Reilly
Program Management Division

cc: ☒ M. Hankard
Document Control (2)
File: 304.01



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION I

J.F. KENNEDY FEDERAL BUILDING, BOSTON, MASSACHUSETTS 02203-2211

February 21, 1992

Mr. David Reilly
Program Management Division
Massachusetts Water Resources Authority
Charlestown Navy Yard
100 First Avenue
Boston, Massachusetts 02129

092020921

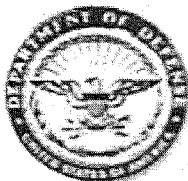
Dear Mr. Reilly:

We have received your letter dated February 10, 1992 regarding the Federal Energy Regulatory Commission Review of Hydropower Facilities at Deer Island and we concur with our assessment of the environmental impacts of the facilities.

Sincerely,

Donald R. Manfredonia
Donald R. Manfredonia, Chief
Water Quality Branch





DEPARTMENT OF THE ARMY
NEW ENGLAND DIVISION, CORPS OF ENGINEERS
424 TRAPELO ROAD
WALTHAM, MASSACHUSETTS 02254-9149

March 25, 1992

Planning Directorate
Basin Management Division

PROGRAM MANAGEMENT UNIT

092031546

'92 MAR 31 P12:11

Mr. David Reilly
Massachusetts Water Resources Authority
Charlestown Navy Yard
100 First Avenue
Boston, Massachusetts 02129

Dear Mr. Reilly:

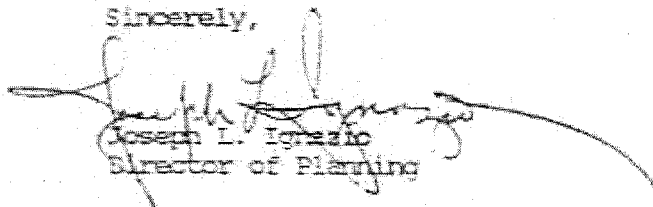
This is in response to your letter of February 13, 1992, requesting that the Corps of Engineers, New England Division, review and provide comments on a submittal by your office on the Application for Conduit Exemption of Hydropower Facilities at Deer Island/Boston Harbor Project.

At this time, we offer the following comments for your consideration, however, the Corps will conduct a more extensive review of this project when requested to do so by the Federal Energy Regulatory Commission.

Projects for hydroelectric power generating facilities may require Department of Army permits under Section 404 of the Clean Water Act and under Section 10 of the Rivers and Harbors Act. You may contact the Regulatory Division (ATTN: CENED-OD-R) of the New England Division to receive information on these permit procedures. The toll free telephone number is 1-800-343-4789 (1-800-362-4367 if calling within Massachusetts).

Should you have any questions regarding this response, you may contact Mr. David Sward of my staff at (617) 647-8647.

Sincerely,


Joseph L. Igrazio
Director of Planning



DEPARTMENT OF THE ARMY
NEW ENGLAND DIVISION, CORPS OF ENGINEERS
424 TRAPELO ROAD
WALTHAM, MASSACHUSETTS 02254-9149

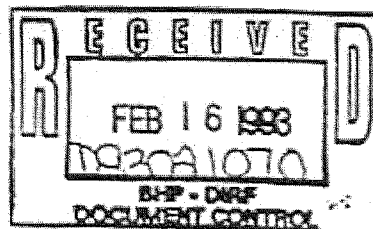
February 9, 1993

FILED 100-20
Check
100-20

P9305623C

Regulatory Division
CENED-OD-R-1993-00235

David Reilly
Mass Water Resources Authority
Charlestown Navy Yard
100 First Avenue
Boston MA 02129



Dear Mr. Reilly:

We have received your application for a Department of the Army permit to construct a hydropower plant at the Deer Island Wastewater Treatment facility. All work will be in an upland location above the high tide line.

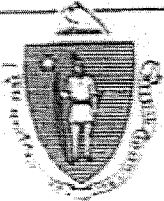
A Department of the Army permit is not required for this work. Our regulatory jurisdiction encompasses all work in or affecting navigable waters of the United States under Section 10 of the Rivers and Harbors Act of 1899 and the discharge of dredged or fill material into all waters of the United States including adjacent wetlands under Section 404 of the Clean Water Act. As shown on your attached plans entitled "HYDROPOWER PLANT AT DEER ISLAND / BOSTON HARBOR PROJECT" dated February 1993. No work will be performed in these areas. Hence, no further action is required.

Sincerely,


Karen Kirk Adams
Chief, Permits Branch
Regulatory Division

C. Kelly

Commonwealth of Massachusetts



Division of Fisheries & Wildlife

Wayne F. MacCallum, Director
26 March 1992

PROGRAM MANAGEMENT UNIT

NHESP File No. 92-146
92 MAR 31 12:11

092031548

David Reilly
Program Management Division
Massachusetts Water Resources Authority
Charlestown Navy Yard
100 First Avenue
Boston, MA 02129

Re: Hydropower Facilities at Deer Island
Request for Conduit Exemption
Boston Harbor Project

Dear Mr. Reilly:

Thank you for contacting the Natural Heritage and Endangered Species Program regarding rare species in the vicinity of the proposed hydropower facilities at Deer Island as described in your letter of 13 February 1992.

At this time, we are not aware of any rare and endangered species within the vicinity of the proposed project. Therefore, we concur with your determination of no adverse impacts to rare species.

Please note that this determination is based on the most recent information available in the Natural Heritage database, which is constantly being expanded and updated through ongoing research and inventory. Should new rare species information become available, this determination may be reconsidered.

Please contact Jay Copeland, Environmental Reviewer, if you have any questions.

Sincerely,

A handwritten signature in dark ink, appearing to read "Patricia Muckery-Tower".

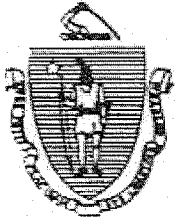
Patricia Muckery-Tower
Assistant Environmental Reviewer

PMT/pht

Division of Fisheries & Wildlife

Leverett Saltonstall Building

Government Center, 100 Cambridge Street, Boston, MA 02202 (617) 727-3151



PHILIP G. COATES
DIRECTOR

The Commonwealth of Massachusetts

*Division of Marine Fisheries
Leverett Saltonstall State Office Building
100 Cambridge Street
Boston, Massachusetts 02202*

727-3193


March 10, 1992

Mr. David Reilly
Program Management Division
Massachusetts Water Resources Authority
Charlestown Navy Yard
100 First Avenue
Boston MA 02129

Dear Mr. Reilly:

The Division of Marine Fisheries has reviewed your letter of February 13, 1992 and attachments. Please be advised that the Division has no objection to the installation of a 2-Unit Bevel Gear Bulb Hydropower system and conduit exemption as part of the Waste Water Treatment System presently under construction.

Sincerely yours,


W. Leigh Bridges
Assistant Director

cc: Philip G. Coates, Director



Commonwealth of Massachusetts
Executive Office of Environmental Affairs

**Department of
Environmental Protection**

William F. Weld
Governor
Daniel S. Greenbaum
Commissioner

09203/289

March 10, 1992

Re: MWRA, Deer Island POTW
Federal Energy Regulatory
Commission Review
Hydropower Facility at
Deer Island
Request for "Conduit
Exemption"

David Reilly, PMD
Mass Water Resources Authority
Charlestown Navy Yard
100 First Avenue
Boston, MA 02129

Dear Mr. Reilly:

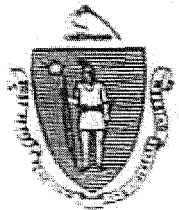
The Division of Water Pollution Control (Division) acknowledges receipt of your correspondence of February 13, 1992, relative to the request for a "Conduit Exemption" from the Federal Energy Regulatory Commission (FERC) for the Bevel Gear Bulb Hydropower System being installed in the Deer Island POTW's effluent outfall channel. Specifically, you request that the Division indicate its concurrence with the proposed facilities. The Division in consultation with DEP's Bureau of Municipal Facilities and Division of Air Quality Control reviewed all of the environmental documents and plan/specifications for the Deer Island Wastewater Treatment Facilities and as part of that review agreed with and approved MWRA's proposal to install this hydropower system.

Please contact Steve Lipman if you or the FERC require any additional documentation relative to this issue.

Very Truly yours,

Brian Donahoe
Brian Donahoe
Director

CC: Richard Fox, MWRA/PMD



COASTAL ZONE
MANAGEMENT

The Commonwealth of Massachusetts

Executive Office of Environmental Affairs

100 Cambridge Street

Boston, Massachusetts 02202

62 MAR 23 1992

89 203/357

March 19, 1992.

David Reilly
Program Management Division
Massachusetts Water Resources Authority
Charlestown Navy Yard
100 First Avenue
Boston, MA 02129

Re: Federal Energy Regulatory Commission Review, Hydropower
Facilities at Deer Island; Boston

Dear Mr. Reilly;

Thank you for submitting information regarding the above referenced
project to the Massachusetts Coastal Zone Management (MCZM) Office.

MCZM has reviewed the materials submitted and has no objection to
the project as proposed. We are pleased that the MWRA is making
efforts to provide for its own power needs for its new treatment
plant on Deer Island.

Please note that this review has been for this project alone, and
does not constitute a blanket concurrence of Federal Consistency
with any other project regulated by the Federal Energy Regulatory
Commission.

Very truly yours,

Jane W. Mead

Jane W. Mead
Project Review Coordinator

JWM/-