Yankee Atomic Electric Company  
49 Yankee Road  
Rowe, Massachusetts 01367  
Attention: Kenneth Dow  

Re: WATER QUALITY CERTIFICATION  
Application for: BRP WW 07 and BRP WW 11  
MAJOR DREDGING OR DISPOSAL OF DREDGED MATERIAL PROJECT/  
MINOR FILL AND EXCAVATION PROJECT  
Site Closure Project, Yankee Nuclear Power Station  
Rowe, Massachusetts  

USACOE Application Number:  
DEP Wetlands File Number: 274-25  

Transmittal Number: W050567  

Dear Mr. Dow:  

The Massachusetts Department of Environmental Protection (hereinafter the Department) has completed its review of the permit application for the project listed above, after receipt of revised information dated August 13, 2004. In accordance with the provisions of Massachusetts General Laws, Chapter 21, Sections 26 through and including 53 and the Regulations promulgated thereunder at 314 CMR 9.00; and Section 401 of the Federal Clean Water Act as amended (33 USC §1251 et seq.), it has been determined there is reasonable assurance this “site closure project” will be undertaken in a manner which will not violate applicable water quality standards (314 CMR 4.00) and other applicable requirements of state law.  

The Department understands that the project entails dredging (as defined at 314 CMR 9.02 Dredging) of no more than 1,700 cubic yards (26,000 square feet) of the substrate of Sherman Reservoir, an artificial impoundment of the Deerfield River meeting the definition of Land Under Water (see 314 CMR 9.02 Land Under Water); and the discharge of dredged material [as defined at 314 CMR 9.02 Discharge... (c)] of 1,563 square feet of Bordering Vegetated Wetland (BVW) (as defined at 314 CMR 9.02 Bordering Vegetated Wetlands) associated with an unnamed intermittent stream tributary to the Deerfield River. The sum of these activities is proposed to impact 27,563 square feet of “Waters of the United States Within the...
Commonwealth” (as defined at 314 CMR 9.02). The discharge of dredged material is intended to be of a temporary nature, and will be fully mitigated through construction of a 3,078 square foot in-situ BVW “Replacement Area” in excess of what is required at 314 CMR 9.06(2).

Therefore, based on information currently in the record, the Department grants a Water Quality Certification for this project subject to the following conditions necessary to maintain water quality, to minimize impact on Waters of the United States Within the Commonwealth, and to insure compliance with appropriate state law:

**Administrative Conditions**

1. This Certification does not relieve the permittee or any other person of the necessity of complying with all other applicable federal, state, or local statutes, ordinances, bylaws, or regulations, including those issued and administered by the US Army Corps of Engineers.

2. The Deerfield River and its associated tributaries and Bordering Vegetated Wetlands are classified in the Massachusetts Surface Water Quality Standards [314 CMR 4.00] as Class B, High Quality Waters, and are protected by the antidegradation provisions of these Standards. Therefore, reasonable care and diligence shall be taken by the contractor(s) to assure that the proposed activity will be conducted in a manner that will avoid violations of these Standards.

3. The contractor(s) employed to execute earth-moving and substrate disturbance activities on the property subject to this Certification must be provided a copy of this Certification prior to the commencement of any earth-moving and substrate disturbance activities. Thereafter, said contractor(s) may be held responsible with the applicant and property owner for violations by the contractor, and may be subject to penalties authorized by law and/or regulation for those violations.

4. This Certification specifically prohibits any activity, as defined at 314 CMR 9.02 Activity, within or upon any “Waters of the United States Within the Commonwealth”, as defined at 314 CMR 9.02, not specifically authorized by this Certification. Any failure to abide by the Conditions of this Certification that results in or contributes to a discharge of dredged or fill material or discharge from dredging, as defined at 314 CMR 9.02, into “Waters of the United States Within the Commonwealth”, as defined at 314 CMR 9.02, shall result in a potential enforcement action on the part of the Department, and possibly other regulatory agencies.

5. The Department shall be notified in writing of any proposed changes in construction methodology or design necessary to complete this project. The Department will determine whether any proposed changes will require a revision to this Certification.

6. All activities authorized by this Certification shall be conducted in accordance with the provisions of the “Integrated Permit Package, Yankee Nuclear Power Station Site Closure Project, Rowe, Massachusetts” dated May 7, 2004 (hereinafter the IPP), and the “Yankee Nuclear Power Station Site Closure Project, Wetland Restoration and Replication” dated
August 2004, DEP File No. 274-25 (hereinafter the Addendum), and additional supplemental information dated August 13, 2004. All techniques, methods, and standards shall follow the plans of record and supporting documentation on file with the Department and as presented within the IPP and Addendum, unless changes requested at Condition # 5, above, are approved, or unless a specific condition or provision of this Certification has expressly modified a given technique or methodology.

7. Within ten (10) business days of the issuance date of this Certification, the applicant shall confirm the nomination of the “compliance monitors” listed in the specifications on page 1, Section 1.1 the Addendum. Upon acceptance by the Department, the “compliance monitors” (hereinafter “monitors”) shall be responsible for all site inspections, monitoring, and reporting required by this Certification, and shall serve as the chief contact between the Department and the applicant. Said monitors or their designee shall directly and visually oversee all activity, as defined at 314 CMR 9.02 Activity, within all “Waters of the United States Within the Commonwealth”. Said monitors or their designee shall keep a daily, written log of compliance with this Certification, and shall make weekly reports to the Department (e-mail, telephone, or facsimile) during construction. The applicant and all other parties subject to this Certification shall comply with all orders and instructions of the monitors, including orders to cease all activity within jurisdictional resource areas when non-compliance with the Certification is observed. The applicant and all other parties subject to this Certification shall not resume activity until such time as the Department has authorized the resumption of activity, which authorization may be written or verbal, direct or through the monitors. This authority shall extend to all on-site personnel under contract to the applicant. Failure to comply with this Condition would constitute a violation of this Certification and could result in enforcement actions taken by the Department. The monitors or their designee shall be available to the Department for rapid response in the event of conditions warranting immediate action. The monitors or their designee shall be on-site during any work within Land Under Water (as defined at 314 CMR 9.02) associated with Sherman Reservoir, and during any dewatering activities associated with dredged material processing. Any change in staffing of the monitors must be approved by the Department.

8. All reports required by all Conditions within this Certification shall be accompanied by the submittal of digital photographs via electronic mail (e-mail) to the following addresses: David.Foulis@state.ma.us. Submitted photographs shall clearly show the extent of project alteration within “Waters of the United States Within the Commonwealth”; the progress in the construction/installation of any required restoration/mitigation; the condition of all required erosion and sedimentation controls; and the construction, installation, and stabilization of all structural and non-structural stormwater management components; as well as any other aspect of the project as it directly relates to the several Conditions of this Certification.

Erosion and Sedimentation Controls

9. At least forty-eight (48) hours prior to commencement of work, erosion and sedimentation control measures shall be installed as provided for and specified in the
plans of record and supporting documentation. After installation, the Department shall be notified via the procedures at Condition #8, above. Structural or other failure of the required erosion and sedimentation control measures which lead to deposition of fill material into “Waters of the United States Within the Commonwealth” would constitute a violation of this Certification, and could result in enforcement actions taken by the Department, and possibly other regulatory agencies.

Prohibitions and Mitigation for Activities in Land Under Water

10. This Certification specifically prohibits the use of stone rip rap, or any other off-site stone product or substance, from permanent emplacement into any “lake”, “pond”, “reservoir”, “stream”, “creek”, or “river”, as defined by reference to 310 CMR 10.04 at 314 CMR 9.02 Land Under Water, save for that specifically described in the IPP and supplemental documents, including Appendix E, Figures P-12 and P14 of the IPP. All stabilization of Land Under Water (“lake”, “pond”, “reservoir”, “stream”, “brook”, or “river”) shall be accomplished through the methods described in the IPP, unless some other methodology is proposed by the applicant in writing and approved by the Department per Condition #5 of this Certification. In addition, the applicant shall report the square footage of rip rap to be placed in Land Under Water per the IPP prior to placement otherwise allowed by this condition. If substrate stabilization is needed at the East Storm Drain Outfall into Sherman Reservoir, as determined by the Massachusetts Department of Conservation and Recreation, Office of Dam Safety, the Department recommends use of innovative approaches such as “boulder clusters” or native rock fragment arrays.

11. Prior to any work authorized by this Certification, the limit-of-work, as designated and delineated in the plan(s) of record, and as approved by this Certification, shall be clearly delineated in the field and within the boundaries of Land Under Water (LUW) (as defined at 314 CMR 9.02) for the duration of all activities allowed by this Certification, and shall not be removed unless and until the Department authorizes. This boundary shall be demarcated with the “PVC or steel rods” shown in Appendix E, Figure P9 of the IPP, which shall be painted in a bright color or clearly marked with flagging. After initial placement, the monitor shall ensure correct placement, and then submit confirmation per Condition #8. Floats or buoys used within navigational waterways shall meet all standards and requirements of the United States Coast Guard, First Coast Guard District, if any.

12. Dredging, as defined at 314 CMR 9.02, conducted in accord with this Certification may only begin following the twenty-one (21) calendar day appeal period and once all other required permits and licenses have been received.

13. Within thirty calendar (30) days of the completion of all dredging, the applicant shall submit a report per Condition #8 recording depth from the elevation of Mean Annual Low Water Level (MALWL) [as defined at 310 CMR 10.56(2)(c)] along at least two (2) transects located within the “limit of work” in LUW. The total number of transects, and the number of sampling points along each transect, shall be sufficient to adequately document the depth and volume of dredging versus pre-alteration substrate conditions.
This information shall be presented in tabular format, and also shown on a cross-sectional plan(s), with the MALWL clearly demarcated.

14. Should the applicant need to request an amendment to this Certification for continuation or completion of dredging beyond the expiration of this Certification or within any dredging prohibition period(s) specified in this Certification, a written request shall be received by the Department per Condition #5 of this Certification. Requests for such amendments will be considered at the Department’s discretion.

15. The following dewatering and disposal conditions (DEP Interim Policy Comm-94-007) shall be complied with for any dredge material to be used at a lined landfill:
   a. Sediment recovered through dredging shall be dewatered prior to vehicular transportation. Recovered sediment shall contain no free-draining liquids. When there is a question as to whether this standard is met, the Paint Filter Test, EPA Method 9095, shall be used to determine the presence of free-draining liquids in a representative sample;
   b. A tarpaulin or other means shall be used to completely cover sediment during transport; and
   c. Sediment shall be accompanied to the approved landfill by a DEP Material Shipping Record (MSR) completed by a qualified environmental professional as specified in the instructions provided with the MSR form (enclosed).

Compliance With Massachusetts Natural Heritage and Endangered Species Program Adverse Affect Determination

16. All parties identified at Condition #3 shall fully comply with all requirements specified within the Massachusetts Natural Heritage and Endangered Species Program (NHESP) “adverse affect determination” dated July 2, 2004, and any follow-up correspondence from NHESP, unless and until the presumption afforded NHESP at 310 CMR 10.59 has been overturned by the Rowe Conservation Commission per 310 CMR 10.59, as documented in writing to the Department. These requirements hereby form a part of, and are inseparable from, this Certification.

 Provision of Bordering and Isolated Vegetated Wetland Replacement Area

17. The applicant shall mitigate for all approved fill, dredging, and placement of dredge spoil, either permanent or temporary, within Bordering Vegetated Wetland (BVW) and Isolated Vegetated Wetland (IVW) [see 314 CMR 9.02 for definitions] at a ratio of at least 1:1 per the requirements of 314 CMR 9.06(2). This mitigation shall be referred to in this Certification as the “BVW Replacement Area”. The BVW Replacement Area shall be constructed per the methodology described in the Addendum and attached plan(s) of record. Any deviation from the methodology approved by this Condition of the Certification must be requested in writing and approved by the Department per Condition #5 of this Certification. The proposed “Replacement Area” shall be initially excavated according to the plan(s) of record. Donor soil placement, organic amendments, and
plantings shall not be placed within the BVW Replacement Area until such time as the
monitors have verified that the final excavated grade for the said Replacement Area will
allow the finished grade of the Replacement Area to be less than or equal to the elevation of
the surface of the substrate of the extant and adjoining Bordering Vegetated Wetland, as
measured at the interface of the proposed Replacement Area and the present boundary of
said Bordering Vegetated Wetland, and as shown on the plan(s) of record. Said plan(s) of
record indicate that the finished substrate of the proposed “replacement area” will be located
at the approximate elevations, as expressed in feet above mean sea level (NGVD), shown in
Figures 4 through 6 of Appendix A of the Addendum. The monitors shall verify in the field
that these elevations will meet the requirements of this Condition. The Department reserves
the right to modify the aforementioned “BVW Replacement Area Plan” and any other
plan(s) necessary in order to meet the requirements of 314 CMR 9.00, including 314 CMR
9.06(2).

18. The Department hereby approves the “Planting Plans (Section 3.0)” specified in the
Addendum. Please note that sandbar willow, Salix exigua, is a Commonwealth-listed
“species of special concern”, and is not native to Berkshire County. Formal records
should indicate clearly that sandbar willow is planted, and does not occur naturally at the
site. Any modification of species, ratios, or seeding techniques must be requested by the
applicant in writing and approved by the Department per Condition #5 of this
Certification. Additional applications of the approved seed mix shall be used when
appropriate to maintain optimum surficial coverage of vegetation, until such time as the
BVW Replacement Area has been fully stabilized and is functioning as BVW, as
determined by the monitors per Condition #19 of this Certification.

19. The monitors approved by the Department or their designee shall monitor the status of
the BVW Replacement Area in calendar years 2005 and 2006, and then until such time as the
BVW Replacement Area functions in accordance with 314 CMR 9.06(2), as established
by data collected during monitoring. Monitoring shall include, at a minimum, the
collection of all data required in Sections I and II of “DEP Bordering Vegetated Wetland
(310 CMR 10.55) Delineation Field Data Forms” (Appendix G). All vascular plants
within the proposed BVW Replacement Area, as shown on the plan of record, shall be
identified to the species level. Scientific nomenclature shall follow The Vascular Plants
of Massachusetts: A County Checklist (Sorrie & Somers 1999) or an equivalent
acceptable to the Department (as established in writing). At least two (2) Appendix Gs
shall be completed for two (2) distinct locations within the BVW Replacement Area.
Sampling shall take place at least once in each growing season in the years specified in
this Condition. Each sampling event shall include hydrologic data garnered from
“observation holes”. These “observation holes” shall be at least twenty-four inches deep,
as measured from the surface of the mineral soil horizon. Alternatively, and with the
permission of the Department, the monitors or their designee can establish a shallow
monitoring well, directly adjacent to the two (2) plots within the BVW Replacement
Area. The shallow monitoring wells shall be constructed, installed, and operated in
accordance with “Installing Monitoring Wells/Piezometers in Wetlands” [US Army
Corps of Engineers WRP Technical Note HY-IA-3.1, August 1993]. During each
sampling event, color photographs or color reproductions of photographs (digital
photographs or color photocopies) shall be taken of each of the two (2) separate plots within the BVW Replacement Area, and of the observation holes established by this Condition. All data collected during each of the years specified in this Condition shall be submitted in a written report entitled “BVW Replacement Area Monitoring Report-Site Closure Project, Yankee Nuclear Power Station, Rowe, Massachusetts”. A draft copy shall be submitted to the Department on or before November 30th of each year specified by this Condition. A final copy shall be sent to the Department within thirty (30) calendar days of the receipt of draft comments by the Department.

20. The monitors or their designee shall collect data on wetland hydrology within the BVW Replacement Area at least once per month during the growing season in the years specified at Special Condition #19. The monitors or their designee shall use the “observation holes” or shallow monitoring wells required by Special Condition #19 in order to achieve the objectives of this Condition. At a minimum the monitors or their designee shall record depth to apparent water table and/or depth of surface inundation, both as measured from the soil surface [see Delineating Bordering Vegetated Wetlands Under the Massachusetts Wetlands Protection Act (DEP 1995) for a definition] during each monthly observation. This data shall be included within the report required at Special Condition #19.

21. Based upon the data collected during sampling events, the monitors, or the Department upon its own initiative, shall render a conclusion within each report required by Special Condition #19, as to the success of the BVW Replacement Area in terms of 314 CMR 9.02(6), including the establishment of wetland hydrology. If, at the end of the second growing season, the monitors or the Department render a conclusion that the BVW Replacement Area has failed the standards specified at 314 CMR 9.06(2), said monitors shall prepare and submit a written “corrective plan of action” no later than the end of that calendar year to the Department for approval. The approved “corrective plan of action” shall be implemented the next growing season under the supervision of a monitor approved by the Department, and shall be monitored via the requirements specified in the several Conditions of this Certification.

Miscellaneous

22. This Certification is restricted in its scope and jurisdiction to the on-site dredging and dewatering and discharge of dredged or fill material activities as defined at 314 CMR 9.02. This Certification does not constitute an approval, nor shall it limit the Department’s authorities, under c. 21E and 310 CMR 40.0000, the Massachusetts Contingency Plan, for any remedial actions and activities being undertaken at the site related to the placement, reuse and/or disposal of dredged material in upland areas.

This Certification does not relieve the applicant of the obligation to comply with other applicable state or federal statutes or regulations. The Applicant is reminded of the requirement to comply with all the conditions of the US Army Corps of Engineers Programmatic General Permit (available from the US Army Corps of Engineers at 1-800-362-4367). Any changes proposed for the project as described in the previously submitted §401 Water Quality Certification
application, or supplemental documents will require further notification to and approval of the Department.

Appeal Rights

Certain persons shall have a right to request an adjudicatory hearing concerning certifications by the Department when an application is required:

a. The applicant or property owner;
b. Any person aggrieved by this certification who has submitted written comments during the public comment period;
c. Any ten (10) citizens of the Commonwealth pursuant to MGL c. 30A where a group member has submitted written comments during the public comment period; or
d. Any governmental body or private organization with a mandate to protect the environment that has submitted written comments during the public comment period.

Any person aggrieved, any ten (10) citizens of the Commonwealth, or a governmental body or private organization with a mandate to protect the environment may appeal without having submitted written comments during the public comment period only when the claim is based on new substantive issues arising from material changes to the scope or impact of the activity and not apparent at the time of public notice. To request an adjudicatory hearing pursuant to MGL c. 30A, § 10, a Notice of Claim to an Adjudicatory Hearing must be made in writing, provided that the request is made by certified mail or hand delivery to the Department, with the appropriate filing fee specified within 310 CMR 4.10 along with a Departmental Action Fee Transmittal Form within twenty-one (21) days from the date of issuance of this Certificate, and addressed to:

Massachusetts Department of Environmental Protection  
Office of Administrative Appeals, Docket Clerk  
Post Office Box 4062  
One Winter Street, 3rd Floor  
Boston, MA 02108.

A copy of the request shall at the same time be sent by certified mail or hand delivery to the issuing office of the Wetlands and Waterways Program at:

Massachusetts Department of Environmental Protection  
Springfield State Office Building  
436 Dwight Street  
Springfield, MA 01103.

A Notice of Claim for Adjudicatory Hearing shall comply with the Department’s Rules for Adjudicatory Proceedings, 310 CMR 1.01(6), and shall contain the following information pursuant to 310 CMR 4.10(3):
a. The §401 Certification Transmittal Number and DEP Wetlands Protection Act File Number;
b. The complete name of the applicant and address of the project;
c. The complete name, address, and facsimile and telephone numbers of the party filing the request, and, if represented by counsel or other representative, the name, facsimile and telephone numbers, and address of the attorney;
d. If claiming to be a party aggrieved, the specific facts that demonstrate that the party satisfies the definition of “aggrieved person” found at 314 CMR 9.02;
e. A clear and concise statement that an adjudicatory hearing is being requested;
f. A clear and concise statement of (1) the facts which are grounds for the proceedings, (2) the objections to this Certificate, including specifically the manner in which it is alleged to be inconsistent with the Department’s Water Quality Regulations, 314 CMR 9.00, and (3) the relief sought through the adjudicatory hearing, including specifically the changes desired in the final written Certification; and
g. A statement that a copy of the request has been sent by certified mail or hand delivery to the applicant, the owner (if different from the applicant), the conservation commission of the city or town where the activity will occur, the Massachusetts Department of Conservation and Recreation (when the Certificate concerns projects in Areas of Critical Environmental Concern), the public or private water supplier where the project is located (when the certificate concerns projects in Outstanding Resource Waters), and any other entity with responsibility for the resource where the project is located.

The hearing request along with a Departmental Action Fee Transmittal Form and a valid check or money order payable to the Commonwealth of Massachusetts in the amount of one hundred dollars ($100) must be mailed to:

Commonwealth of Massachusetts
Department of Environmental Protection
Commonwealth Master Lockbox
Post Office Box 4062
Boston, MA 02211

The request will be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver. The filing fee is not required if the appellant is a city or town (or municipal agency), county, or district of the Commonwealth of Massachusetts, or a municipal housing authority. The Department may waive the adjudicatory-hearing filing fee pursuant to 310 CMR 4.06(2) for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file an affidavit setting forth the facts believed to support the claim of undue financial hardship together with the hearing request as provided above.

Failure to comply with this certification is grounds for enforcement, including civil and criminal penalties, under MGL c. 21, §42; 314 CMR 9.00; MGL c. 21A, §16; 310 CMR 5.00, or other possible actions/penalties as authorized by the General Laws of the Commonwealth.
If you have questions on this Certification, please contact David Foulis at 413-755-2154.

Sincerely,

[Signature]

Robert J. McCollum
Wetlands Program Chief

P://Dfoulis/ERO WWP Templates/ERO WQC/401 WQC W050567 Certificate

Certified Mail #7003 2260 0006 8596 7322, return receipt requested.

cc: Rowe Conservation Commission

United States Department of the Army
New England District, Corps of Engineers
696 Virginia Road
Concord, MA 01742-2751
Attention: Paul Sneeringer

Kevin Mooney
Massachusetts Department of Conservation and Recreation
Office of Waterways
349 Lincoln Street, Building #45
Hingham, MA 02043

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