

Rx 03-04-09



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west virginia department of environmental protection

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Division of Water and Waste Management  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304  
Telephone Number: (304) 926-0495  
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Joe Manchin III, Governor  
Randy C. Huffman, Cabinet Secretary  
[www.wvdep.org](http://www.wvdep.org)

February 24, 2009

Ms. Ginger Mullins  
Chief, Regulatory Branch  
Huntington District, Corps of Engineers  
502 Eighth Street  
Huntington, West Virginia 25701-2070

Re: State 401 Water Quality Certification, CELRH-OR-F  
Public Notice No. LRH-2008-00293-OHR; City of New  
Martinsville, Willow Island Hydroelectric Project, along  
the left descending bank, Ohio River at mile 161.7 near  
Waverly, Pleasants County, West Virginia: WQC 080018.

Dear Ms. Mullins:

The West Virginia Department of Environmental Protection-Division of Water and Waste Management (WVDEP-DWWM), in conjunction with the West Virginia Division of Natural Resources - Wildlife Resources Section (WVDNR-WRS), has completed review of the above-referenced project.

The applicant, City of New Martinsville, is proposing to construct a new hydropower plant adjacent to the Willow Island Lock and Dam. The proposed project encompasses approximately 32 acres, and would include temporary coffer cells, a temporary barge fleeting area, a power house, a new transmission line, an excavated approach channel to the hydropower plant, an excavated exit channel, a permanent road crossing, and temporary and permanent recreation facilities. The project may include the construction of a navigation feature (rock groin) in the tailwaters if it is determined necessary to mitigate for impacts related to the discharge from the hydropower plant.

The Ohio River is a High Quality Stream with an excellent warmwater fishery. The Willow Island tailwaters is a popular fishing location and provides opportunities for catching white bass, hybrid striped bass, sauger, and channel catfish. Eighteen and twenty species of freshwater mussels have been collected from the West Virginia and Ohio shorelines respectively. One species, the sheepsnose, *Plethobasus cyphus*, was recently collected along the right descending bank downstream of the Willow Island Locks, and is a candidate species under consideration for listing as an endangered species. Two mussel species, the Fanshell,

Promoting a healthy environment.

*Cyprogenia stegaria* and the Pink Mucket, *Lampsilis abrupta* are federally listed Endangered Species that have been collected in the Belleville Pool but not in the immediate vicinity of the Willow Island tailwaters.

The temporary cofferdam would be located between the 8<sup>th</sup> gate and the West Virginia shoreline, and will extend approximately 325 feet upstream of the dam and approximately 515 feet downstream of the dam along the left descending side of the river. Aquatic habitat will be destroyed within the coffer dam. The coffer dam would also temporarily block gate 8 which currently provides flow along the left descending bank. Material to fill the coffer cells may be obtained from "on-site sources." If the dredging takes place outside of the coffer dam additional disturbance to aquatic habitat and water quality would be expected. The coffer dam would be dewatered and pumped downstream.

The proposed project would include the excavation of an approach channel upstream of the dam approximately 980 feet long. The approach channel would vary in width from 122 feet to 320 feet. An 865-foot exit channel would be excavated downstream of the dam. The exit channel would vary in width from 114 feet to 190 feet. The approach and exit channels within the coffer dam would be excavated in conjunction with the power house construction. Outside of the coffer dam, the channels would be excavated by conventional dredging or a clamshell dredge.

A temporary barge unloading facility would be located along the left descending bank of the Ohio River approximately 1,500 feet downstream of the Willow Island Dam. The barge facility would be located just upstream of the temporary fishing dock. The public notice does not include dredging an access channel for the barge facility. If an access channel for loaded barges is necessary, disturbance to aquatic habitat would occur and suspended sediment would be expected. The activity of moving and mooring barges in the vicinity of the near-shore shallow water habitat could have an adverse effect on aquatic habitat, spawning areas, and may negatively impact recreation.

The mouth of Cow Creek is a popular fishing location. To accommodate a wider access road the existing culvert is proposed to be replaced with a longer culvert. The proposed culvert would be 110 feet in length with concrete wing walls on the upstream end of the culvert. The project will impact 0.15 acres in wetlands A-1 and A-2 and 0.30 acres of wetlands B-1, B-2 and B-3. The applicant has requested to mitigate for the wetland loss using the In-Lieu Fee option as described in 47 CSR 5A § 6.2.d.2. Mitigation for the culvert shall be in accordance with the following special condition:

#### Special Condition

1. In order to maintain aquatic life movements and manage water flows, the Cow Creek culvert shall be installed using the following criteria:
  - a. The volume of fill for the culverted structure shall be limited to the amount required to achieve transportation purpose.

- b. Culverts shall be installed on the same slope as the streambed where practical.
- c. The culvert width shall be equal to the bankfull channel width.
- d. The culvert inlet/outlets shall be designed and installed in such a manner as to maintain substrate in the bottom of the culvert (culverts installed in bedrock streams do not need to be countersunk). Countersinking the culvert to the sub-pavement of the streambed will generally fulfill this requirement.

Temporary and permanent recreation features will be constructed according to provisions of the Revised Recreation Plan subject to FERC approval. The permanent recreation features will include shore line fishing piers, a paved walkway along the river, a parking lot, access path, public rest rooms and lighting. The recreation plan for the project is being amended at the applicant's request and the final recreation plan has not been finalized to date.

The 401 Certification and conditions, dated April 10, 1987, and the amendment to the 401 Certification and conditions dated February 10, 1994 that are associated with the FERC license are still valid and in effect. The WRS does not object to the issuance of the 401 Certification related to the Corps of Engineers 404 permit subject to the inclusion of the following special and standard conditions:

State 401 Certification, as required by the Clean Water Act, is granted subject to the special conditions and attached 401 standard conditions. Certification shall be effective fifteen (15) days after receipt unless appealed under title 47, Series 5A, Section 7 of the Code of State Regulations, State Certification of Activities Requiring a Federal Permit. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It should be directed to: Director, Division of Water and Waste Management, West Virginia Department of Environmental Protection, 601 57<sup>th</sup> Street SE, Charleston, West Virginia 25304: ATTENTION: 401 Certification Program.

Sincerely,



Scott G. Mandirola  
Acting Director

SGM/lbb

Cc: Mr. Phillip E. Meir, Asst. Vice President  
American Municipal Power-Ohio, Inc.  
2600 Airport Road  
Columbus, Ohio 43219-2242  
U.S. Environmental Protection Agency - Jessica Martinsen  
U.S. Fish and Wildlife Service - Laura Hill  
WVDNR-Wildlife Resources Section, Elkins - Roger Anderson

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION  
CONDITIONS REQUIRED FOR SECTION 404/10 PERMITS  
ISSUANCE AND STATE CERTIFICATION AS REQUIRED BY SECTION 401

Applicant: Willow Island Hydroelectric Project  
Public Notice: LRH-2008-00293-OHR  
WQC #: 080018  
Date: February 24, 2009

1. The permittee is required to employ measures to prevent or control spillage of fuels, lubricants, or any other materials used in construction, from entering the watercourse. In addition the permittee shall not locate refueling, fuel storage, chemical storage, or equipment maintenance areas, within 100 feet of any body of water. The areas where refueling, fuel storage, chemical storage, or equipment maintenance areas are located, shall include containment measures (e.g., liners, dikes, etc.) to ensure that any spillage of materials will not contact surface or ground waters. All spills shall be reported to the State Center for Pollution, Toxic Chemical and Oil Spills hotline at 1-800-642-3074.
2. Upon completion of earthwork operations, all fills in the watercourse or onshore and other areas onshore disturbed during construction are required to be seeded, rip rapped or given some other type of protection from subsequent soil erosion. If rip rap is utilized, it is required to be of such weight and size that bank stress or slump conditions will not be created due to its placement. Fill is to be of such composition that it will not adversely affect the biological, chemical or physical properties of the receiving waters.
3. Land disturbances, which are integral to the completion of the permitted activity and are one (1) acre or greater in total area, must comply with the National Pollutant Discharge Elimination System stormwater permit requirements as established by the West Virginia Department of Environmental Protection, Division of Water and Waste Management. Best Management Practices for Sediment and Erosion Control, as described in the West Virginia Department of Environmental Protection's Erosion and Sediment Control Best Management Practice Manual, 2006, or similar documents prepared by the West Virginia Division of Highways, U.S. Department of Agriculture, Natural Resource Conservation Service (NRCS), or West Virginia Department of Environmental Protection's, Division of Mines and Reclamation may be used. These handbooks are available from the respective agency offices.
4. Removal of mature riparian vegetation not directly associated with project construction is prohibited. General disturbance and removal of vegetation is to be minimized.

5. All permit modifications must be recertified.
6. Deposition of dredged or excavated materials onshore and all earthwork operations are required to be carried out in such a way that sediment runoff and soil erosion to the watercourse are controlled and minimized. Spoil materials from the watercourse or onshore operations, including sludge deposits, shall not be dumped into the watercourse or deposited in wetlands. Areas for deposit of dredged materials shall be provided with temporary dikes or bulkheads for separation and retention of settleable solids.
7. Bilge, ballast or wash water pumped from barges shall not be discharged to the water course without acceptable removal of solids, oils or toxic compounds.
8. Equipment for handling and conveying materials at this facility shall be designed and operated to prevent dumping or spilling materials into the watercourse. Necessary steps shall be taken to prevent materials spilled or stored onshore from washing into the watercourse as a result of clean-up activities, natural runoff or flooding. Excessive dust shall be controlled and kept out of the watercourse.
9. Green concrete shall not be permitted to enter the watercourse. Concrete handling equipment shall not discharge waste washwater into a watercourse or wetland without adequate wastewater treatment.
10. The applicant must contact the WVDNR-Office of Land and Streams (Telephone 304- 558-3225) prior to any stream disturbance to determine if a Stream Activity Application will be required.
11. Should potentially hazardous waste materials be located, the permittee shall advise the WVDEP-Office of Waste Management (Hazardous Waste Section), at telephone number (304) 926-0465, prior to disturbance of material.
12. The permittee shall provide a copy of the State 401 Certification to the construction contractor. A copy of the State 401 Certification shall be available at the project site until such time as the project is complete.
13. The permittee will comply with water quality standards as contained in the West Virginia Code of State Regulations, Requirements Governing Water Quality Standards, Title 47, Series 2.