UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Hydro Matrix Limited Partnership) FERC No. 12737-0001

MOTION TO INTERVENE OF TROUT UNLIMITED AND COMMENTS ON PRE-APPLICATION DOCUMENT

Pursuant to Rules 211 and 214 of the Federal Energy Regulatory Commission's ("FERC" or "Commission") Rules of Practice and Procedure, 18 C.F.R. §§ 385.211 and 385.214, the Roanoke Chapter of Trout Unlimited and the Virginia Council of Trout Unlimited (hereinafter collectively referred to as "TU") hereby move to intervene in the above captioned proceeding. TU also hereby submits its comments on the pre-application document (PAD) filed by Hydro Matrix Limited Partnership. All filings, orders, correspondence, and other notices respecting this intervention should be sent to *each* of the following:

Leon F. Szeptycki
Director, Environmental Law and Conservation Clinic
University of Virginia School of Law
580 Massie Road
Charlottesville, VA 22903
ls9u@virginia.edu

R. Marvin Huffman
Roanoke Trout Unlimited
4124 Snowbird Circle SW
Roanoke, VA 24018
rmhuffman@cox.net

John Ross
Chair, Virginia Council of Trout Unlimited
P.O. Box 521
Upperville, VA 20185
jross@crosslink.net

I. Description of Intervenor

TU is a national not-for-profit organization with over 150,000 members and volunteers in about 400 chapters nationwide. The organization's mission is to conserve, protect, and restore North America's trout and salmon fisheries and their watersheds. The Roanoke Chapter is based out of Roanoke, Virginia, and has 323 volunteer members, many of whom fish, boat, and recreate in the portion of the Jackson River downstream of Lake Moomaw ("Jackson River Tailwater," or "Tailwater") and in Lake Moomaw itself. The Virginia Council has over 4,000 members, and represents those members and their local chapters on issues of statewide concern. The Jackson River Tailwater is a premier fishery and is therefore a matter of concern to TU members throughout Virginia. TU members from around the state regularly fish and boat in the Tailwater

II. Grounds for Intervention

Over the last ten years or so, a remarkable wild trout fishery has taken hold in the Jackson River Tailwater. This fishery is the result of the high quality, cold water that flows out of Gathright dam. A wild, self-sustaining trout population has highly demanding habitat and water quality needs, and TU is concerned that any change in the flow regime, temperature, or quality of that water might have harmful effects on the fishery. HMP's Pre-Application Document (PAD) proposes changes to the current flow regime in the Tailwater and will alter the current intake structure of the dam. Although those changes may appear modest, their effects may be difficult to predict. TU is intervening to ensure that no license be granted for this project until the applicant can show that project construction and operation will have no effect on the temperature,

flows, or water quality in the Tailwater. Such a showing is needed to ensure that the Jackson's wild trout fishery and overall aquatic health will not suffer. The participation of TU will enable development of a more complete record, will lead to more informed decision-making, and is in the public interest.

III. Comments on Pre-Application Document

TU requests that FERC not allow the licensing to move forward based on the information the applicant has provided to date. FERC should not allow this licensing to proceed unless HMP shows that project operations will not alter the flow regime, the water quality, or the temperature of the Jackson River Tailwater.

A. History of the Jackson River Tailwater

The recreational portion of the Tailwater runs seventeen miles, from the stilling basin below Gathright Dam to the water treatment plant intake in Covington. Flows are carefully controlled by the U.S. Army Corps of Engineers ("the Corps") to maintain downstream water quality, control flooding, and provide recreation for anglers. An agreement during the construction of Lake Moomaw was struck to develop the Tailwater into a self-sustaining trout fishery, in part to compensate for the loss of river habitat flooded by the lake and the loss of the smallmouth bass fishery that thrived in the river before the dam was built. The Corps constructed an intake tower consisting of nine multi-level portals to provide high quality water downstream of Gathright Dam.

The lake began to fill in 1982, and from 1982 to 1989, the Corps released surface water from Lake Moomaw into the Jackson River. As a result, summer water temperatures in the Tailwater were too warm for a reproducing trout population. In 1989 the Corps began pulling water from the cold layer of Lake Moomaw, providing a cooler,

more hospitable habitat for trout. The first truckload of trout was stocked in the Tailwater in December 1989, and approximately 25,000 brown trout and 25,000 rainbow trout advanced fingerlings were stocked annually until 1997. After eight years of stocking, enough sexually mature trout remained in the Tailwater to allow natural reproduction to sustain the population. Since the late 1990s, wild rainbow and brown trout have prospered in the Tailwater, and the Virginia Department of Game and Inland Fisheries (VDGIF) has not stocked the Tailwater in over ten years. Studies by the VDGIF indicate that the upper third of the Tailwater currently supports a wild trout population of 1,300 fish per mile, with a majority being rainbow trout.

B. Value of the Jackson River Tailwater

The Jackson River Tailwater is the second-longest wild trout stream in Virginia and many consider it the premier cold-water fishery in the state. Because of its excellent water quality, flows, and abundant food supply, the Tailwater produces the most brown and rainbow trout of any river in the state. As a recreational fishery, the Jackson is highly unusual for Virginia, because most wild trout populations in Virginia are found in small mountain streams.

All of this means that the Tailwater provides excellent recreational opportunities for anglers. The VDGIF estimates that the Tailwater provides 5,002 angler days per year. Currently, wading anglers outnumber floating anglers by a 1.5 to 1. The high quality of outdoor recreation provided by the Tailwater is a crucial boon to the economy in the area. Allegheny and Bath counties, for example, estimate that the Gathright complex, including the Tailwater fishery, contributes $200,000 annually to the local economy. Because the Tailwater is a self-sustaining fishery, it requires minimal expenditure of public funds.

Total VDGIF expenditures at the Tailwater for fiscal year 2007 amounted to $3,000. This is an extremely low amount of money to spend on a trout fishery compared to the cost of stocking fish. The fishery requires minimal management and intervention on the part of VDGIF because of high quality habitat and excellent water quality.

C. TU's Concerns with the Proposed Gathright Project

Because of the unique environmental, recreational, and economic value of the Tailwater, TU is concerned about the potential effects that the proposed project might have on the Tailwater's trout fishery. This concern is heightened because of the demanding habitat needs of a wild trout fishery. These concerns are not addressed by HMP in the PAD, and TU believes further study and analysis should be conducted before FERC issues a license for this project. HMP provides no real data that the installation and operation of the project will not change water quality or cause no damage or loss to the trout fishery. FERC should only license this project if HMP can show that its operation will not affect the flow regime, water quality, or temperature of the Tailwater.

1. Recreational Concerns

The original Reduced Flood Release (RFR) plan would have increased the continuous rates of flow in the Tailwater for significant periods of time from December through May, cutting into the number of days anglers can safely wade and fish the Tailwater. Current average flows (outside of flood releases) range from 158 to 283 cfs throughout the year, and provide a good environment for fishing. Continuously releasing flows 350 cfs or greater, as the original PAD proposed to do between December and May, would make it much more difficult for anglers to wade the Tailwater during those months.

While preparing these comments, TU received the applicant's revised RFR proposal. TU has not had time to fully review this proposal or to discuss it with relevant agencies and stakeholders. The revised proposal does appear to represent an improvement over the original RFR plan, but would still result in a greater period of higher flows. TU looks forward to discussing and evaluating this proposal further, but TU's current view is that the license should not authorize any change in the current flow regime, and that if such a change is needed to make the project economical, FERC should not grant the license. If FERC does consider the revised RFR proposal, it should require the applicant to obtain more data regarding the effect of altered flows on fishing opportunities, including soliciting angler surveys and input from angler groups such as TU.

2. Water Quality and Temperature

One of the reasons why the trout fishery has prospered in the Tailwater is because of the excellent quality water and flow rates released by the dam. Under Virginia water quality standards, the Tailwater is classified as a natural trout water (9 VAC 24-260-430), meaning that the Tailwater must maintain a minimum dissolved oxygen (DO) level of 6 ppm, and a daily average of 7 ppm (9 VAC 25-260-50). Maintaining the current flow regime will ensure that DO levels remain high and meet the requirement for natural trout waters. More information is needed from the applicant and the Corps to confirm whether this will continue during and after installation of the project.

The dam includes two lower-level portals, which are essential for mixing cold water with water from upper-level portals and for maintaining a downstream minimum of 6 ppm dissolved oxygen ("DO") and a release temperature of around 59 degrees

Fahrenheit during summer months. In fact, water quality data from the Corps show that DO levels of water released from the dam are much higher than minimum standards and approach saturation rates. DO readings for water released from the dam can be as high as 12 ppm, and between June 1992 and November 2007 DO levels of releases averaged 9.5 ppm. These data also show that the water is also exceptionally clean and generally free of heavy metals and other contaminants. We recognize that the temperature requirements for the intake of water by the Westvaco plant in Covington will need to be maintained. However, TU is concerned that the PAD does not include enough information to confirm that the release temperatures and the high DO levels will not change. The sliding power module proposed in the PAD would cover one of the lower-level portals and a mid-level portal most of the time. The partial or full blockage of these portals may limit the Corps' ability to attain downstream water quality standards during the summer. TU is also concerned that this blockage may make it more difficult to blend water from the upper and lower layers of the reservoir during the springtime.

The PAD also indicates that water for turbine operations will be withdrawn using a cylinder gate for upper level withdrawals and "one or two" gates lower in the module. We have not seen water quality or temperature data confirming that this will match current water quality, or data from the Corps confirming that the change from the current ports to the cylinder gate and lower gates will be using the same water as current releases.

FERC should not grant the license until HMP has worked with the Corps to confirm and document that the sliding power module is consistent with maintaining the Corps' current mixing practices, historical DO levels, and historical temperatures. It is important to note here that the very high DO levels and overall quality, which exceed

state standards, may be a driving factor in the robust health of the trout fishery. TU would like to see confirmation that the proposed project will not change the mixing practices for water released from the dam. The PAD currently includes no data to that effect, only assurances that the turbine intake gates will take water from the same level.

Finally, TU is concerned that heat generated from the turbine might increase the temperature of water releases from the dam. Again, HMP should provide data confirming that its proposed turbine will not affect water temperature. This could include information relating to the operation of similar turbines in other reservoirs.

3. Effects of an Increased Lake Level

The original proposed RFR plan would have slowed the release of floodwaters from Lake Moomaw, resulting in increased lake levels that would, for part of the year, flood an additional fifty acres of Lake Moomaw's upland and wetland habitat. This would have the potential to alter the lake's ecological balance, shoreline topography, and ratio of warm to cold water. The PAD does not analyze whether altering the ratio of warm to cold water might affect the temperature of water released from the dam to the Tailwater.

Furthermore, according to the VDGIF, maintaining a newly inundated area for a long period and then slowly dropping the lake level during critical nesting periods could have a negative impact on several important sport fish in the lake, including black bass, sunfish, and catfish. The release plan could also increase shoreline erosion and cause the loss trees and other vegetation currently lining the banks of the lake.

TU opposes this change in the flow regime based on currently available information. The risks of these changes are not justified by the additional electricity that

would be generated. As noted above, the revised RFR would mitigate some of these effects and represents an improvement on the original proposal. TU still questions whether the slight increase in power generation justifies potential negative effects, and our current position is that the application should only be approved if the project would be economical using the current flow regime.

4. Economic Concerns

The Gathright Project, as currently proposed in the PAD, will reduce the number of angling days available to fishermen and boaters, thus reducing the economic benefit of the Tailwater to neighboring counties. Furthermore, if the project proceeds as planned, HMP will not provide employment opportunities or other meaningful economic contributions to the region—aside from taxes to one jurisdiction. Any potential loss of angling days, recreation on Lake Moomaw, and effects on the local economy should be studied if the applicant wishes to proceed with the RFR plan.

III. Statement of Position

Before FERC issues a license for this project, TU recommends that HMP be required to provide more information and analysis concerning the following points:

- The effect of the project on dissolved oxygen levels in the Tailwater;
- The effect that heat generated from the dam's turbine will have on the temperature of water released from the dam;
- The effect that blockage of the dam's portals and switching water intake from the current portals to the "cylinder gate" and the lower turbine gates will have on downstream water quality and on the Corps' ability to blend water from the upper and lower layers of the reservoir;
- The effect of increased lake levels on the ratio of warm to cold water;
- The effect of changing the pond levels on plant and animal life in Lake Moomaw, specifically including the black bass, sunfish, and catfish; and

- The economic effect of reduced angling days as a result of the project compared with the project's tax revenue.

In light of the above gaps in information, TU opposes the approval of HMP's licensing application at this juncture. If this licensing proceeds, TU will seek to have the following recommendations implemented in the license:

- The license should only be granted based on sufficient information that project operations will not change the flows, water quality, or temperature from the conditions that have prevailed over the last 20 years.
- Water quality inflows, lake water releases, and Tailwater releases should be monitored in frequencies and scope as determined by the applicant and the relevant government agencies for deviation from historical standards;
- Test samples shall be taken at locations and frequencies to be determined by the VDGIF and other relevant government agencies and stakeholders;
- All water quality monitoring information shall be maintained for public inspection at the Corps' Lake Moomaw office, on a website maintained by HMP, and other such places as may be specified by the state or federal government;
- All costs associated with the above monitoring requirements and necessary data interpretation shall be paid for by HMP; and
- Prior to commencement of construction and at all times thereafter, HMP shall provide and maintain a cash bond of an inflation-adjusted amount deemed adequate by the VDGIF to fully restore the impacted area for any loss of wildlife, aquatic life, or water quality caused by the activities of HMP.

V. Conclusion

TU opposes the licensing of the Gathright Hydroelectric Project based on currently available information. HMP's Pre-Application Document proposes changes to the current flow regime that may have deleterious effects on one of the most valuable wild trout fisheries in Virginia. HMP should be required to perform the additional studies or collect additional data on the effect of the project on the trout fishery before licensing. The license should only be granted based on sufficient information in the record that the

Tailwater's trout fishery and aquatic ecosystem will not be affected and that the health of Lake Moomaw will be protected.

Respectfully submitted,

TROUT UNLIMITED

By: _____

Leon F. Szeptycki, Esq.
University of Virginia School of Law
Environmental Law and Conservation Clinic
580 Massie Road
Charlottesville, VA 22903
ls9u@virignia.edu
(434) 924-3825

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Charlottesville, Virginia, this 13th day of May, 2008.

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Leon F. Szeptycki