

UNITED STATES DISTRICT COURT
DISTRICT OF MAINE

FRIENDS OF MERRYMEETING BAY AND ENVIRONMENT MAINE,)	
)	
Plaintiffs,)	
)	
v.)	Civil No. 11-cv-00035-GZS
)	
BROOKFIELD POWER US ASSET MANAGEMENT, LLC, and HYDRO KENNEBEC, LLC,)	
)	
Defendants.)	

DECLARATION OF KEVIN R. BERNIER

I, Kevin R. Bernier, declare as follows:

1. I am employed as Manager, Licensing and Compliance, at Brookfield Renewable Power. My office is located at 1024 Central Street in Millinocket, Maine. I have worked for Brookfield since February 2002.

2. I am a graduate of the University of Maine. I received a Bachelor of Science in Wildlife Biology in 1982, and a Bachelor of Arts in Mathematics in 1983.

3. From 1983 to 2002, before I started work at Brookfield, I worked as a fisheries biologist at Great Northern Paper's proposed and existing hydroelectric and storage dams on the Penobscot River.

4. When I started work at Brookfield, I was an environmental and FERC compliance specialist. I spent most of my time ensuring regulatory and environmental compliance. I became a manager for Brookfield about two years ago. Among my current duties, I am

responsible for the company's regulatory compliance for hydro facilities in New England, including compliance with environmental as well as fish and wildlife regulations, such as the Endangered Species Act.

5. Regulatory compliance is among Brookfield's top priorities. As part of my duties, I routinely work with the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (FWS), as well as State agencies such as the Department of Marine Resources (DMR) and Department of Inland Fisheries and Wildlife (DIFW), regarding many issues. One of those issues is the conservation and preservation of Atlantic salmon in the Gulf of Maine Distinct Population Segment (DPS).

6. As part of my duties at Brookfield, I have become familiar with the Hydro Kennebec Project and the fish passage system there. There are other dams along the Kennebec River, and I have attached a copy of a map of the river and dams as *Exhibit A*.

7. Brookfield owns and operates the 15 MW Hydro Kennebec Project in Winslow, Maine. The current dam was built in the 1980s, replacing a 19th century dam at that same location. Brookfield acquired a leasehold interest in the facility from Madison Paper in 2005. Brookfield installed a downstream fishway at the facility for Atlantic salmon and other migratory species in 2006. Brookfield's lease of the dam expired in 2009. In March 2010, Brookfield purchased the dam from Madison Paper.

8. Even before purchasing the dam in 2010, Brookfield worked cooperatively with NMFS and FWS to promote safe passage of salmon and other fish through the dam. We initiated formal discussions with resource agencies regarding fish passage at the dam when we leased it in 2005. Since then, we have shared our studies and reports regarding fish passage, fish migration, and equipment evaluations. The installation of the downstream fishway in 2006 was based upon

the expertise of fish passage engineers and site-specific characteristics and information, and with guidance and input from the agencies.

9. Upstream migrating Atlantic salmon have likely not reached the Hydro Kennebec site for well over 100 years. This is because there were no upstream fish passageways at dams below Hydro Kennebec until 2006. Since 2006, the Atlantic salmon are trapped at the Lockwood Dam, which is downriver from Hydro Kennebec, and trucked to the Sandy River, a tributary to the Kennebec upriver from Hydro Kennebec.

10. Atlantic salmon migrate downstream past Hydro Kennebec when post-spawning adults (known as kelts) migrate in the spring and fall, and juveniles (known as smolts) migrate in the spring. As a result, the federal and state regulatory agencies, as well as Brookfield, have focused on downstream fish passage at the dam.

11. When Brookfield first leased the dam from Madison Paper in 2005, it started discussions with NMFS, FWS, DMR, and FERC to develop a comprehensive and effective means to promote safe downstream passage for Atlantic salmon and other fish. As a result of those discussions, Brookfield installed a state-of-the-art downstream fish passageway costing approximately \$400,000. It was the first structure of its kind on the Kennebec River. Brookfield has also since improved the fish boom (which guides fish to the fishway) to allow safe deployment under a wider variation of river conditions, including higher flow and spill conditions.

12. Brookfield has developed plans to test the effectiveness of the downstream fishway at Hydro Kennebec, and to develop Interim Species Protection Plans (SPP) for the dam, if necessary.

13. On February 22, 2011, the Assistant Regional Administrator of NMFS sent me a letter regarding Brookfield's proposed development of the Interim Species Protection Plan. I have attached a copy of that letter as *Exhibit B*. In that letter, NMFS addresses Brookfield's plans:

Specifically, Brookfield . . . proposes an approach and schedule for protecting listed Atlantic salmon at each project through preparation of a Biological Assessment and SPP and subsequent initiation of Section 7 consultation with the Federal Energy Regulatory Commission (FERC). Brookfield anticipates that the Section 7 consultation with FERC will provide for authorized incidental take of Atlantic salmon for adverse impacts that cannot be avoided or minimized at the projects.

NMFS's Northeast Regional Office has reviewed the proposed approach for addressing Endangered Species Act (ESA) compliance at the Hydro-Kennebec and Mattaceunk Projects and affirms that the approach you have outlined is a reasonable path forward. We look forward to working with you on these issues. Jeff Murphy . . . will be your primary point of contact for Atlantic salmon and the ESA.

14. On March 14, 2011, FERC designated Brookfield to be the non-federal representative to undertake preparation of a draft Biological Assessment, which NMFS will consider in its official Biological Opinion under the ESA consultation procedure. I have attached a copy of the letter as *Exhibit C*.

15. With the approval of FWS, NMFS, and other resource agencies, a consultant working under my direction developed a plan to test the effectiveness of the fishway in passing salmon smolts in their downstream migration past Hydro Kennebec. The study was conducted in May and June 2011. In that study, 98 radio-tagged Atlantic salmon smolts were released over five days above the dam, and their downstream movements were monitored using radio-telemetry. A downstream stationary receiver was located approximately one-half mile below the dam. A total of 95 out of the 98 passed the Project, consistent with normal survival rates of smolt in the river, as it is expected that some smolts will be taken by predation, disease, or other natural causes (or simply regurgitate their tags). Of the 95 smolts determined to have passed


Hydro Kennebec, it was determined that only two individuals did not pass Lockwood, the next dam downstream, and remained in the stretch of river between the two projects. One of those individuals was a smolt passed by spill during release 3 and the other was a smolt passed via turbine Unit 2 during release 4. (From this study, it is not possible to say why these smolts were unable to proceed downstream towards the ocean.) Also, while most smolts passed over the spill and through the downstream bypass, almost 17% of the smolts passed through the dam's turbine units.

16. Working with our experts and consultants as well as the agencies, we expect to complete the preliminary draft Biological Assessment and submit it to NMFS by November 2011. NMFS will then make comments, and we expect to file the draft Biological Assessment with FERC by January 2012. FERC will forward the draft Biological Assessment to NMFS to initiate formal consultation, and we expect that NMFS will file its Biological Opinion with FERC and Brookfield in the spring of 2012.

17. From my training and experience, I know that it is critical that all decisions about the modifications to the dam and its operations to benefit the Atlantic salmon be based upon sound and tested science. Some proposals and plans, even though they are well-intended and may seem logical, can actually harm the species with unanticipated consequences.

I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct to the best of my knowledge, information and belief.

Executed in Winslow, Maine on this 3rd day of October, 2011.


Kevin R. Bernier