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January 15, 2006

Mr. Matthew Scott, Chair
Maine Board of Environmental Protection
State House Station 17
Augusta, ME 04333-0017

Re: Friends Of Merrymeeting Bay Petition To Modify Water Quality Certifications Of Dams On The Kennebec and Androscoggin Rivers

Dear Chairman Scott and Members of the Board:

On behalf of Friends of Merrymeeting Bay (hereinafter referred to as "FOMB"), I write this letter to oppose the requests of various dam operators to dismiss FOMB's September 29, 2006 petition to modify water quality certifications of certain dams on the Kennebec and Androscoggin Rivers (hereinafter referred to as "the Petition"). FOMB respectfully requests that the Board consider this letter in proceedings relating to each river system.

I. THE PETITION DESCRIBES THE FACTUAL BASES AND THE EVIDENCE TO SUPPORT MODIFICATIONS.

FPL Energy Maine Hydro LLC (operators of the Weston and Shawmut hydroelectric dams on the Kennebec River, and the Brunswick, Lewiston Falls and Gulf Island-Deer Rips hydroelectric dams on the Androscoggin), Merimil Limited Partnership (operator of the Lockwood hydroelectric dam on the Kennebec River), Brascan Power New England (operator of the Hydro-Kennebec hydroelectric dam on the Kennebec River), Miller Hydro Group (operator of the Worumbo hydroelectric dam on the Androscoggin River), and the City of Lewiston (operator of the Upper Androscoggin Falls hydroelectric dam on the Androscoggin) argue that FOMB does not provide the factual bases for, or evidence to support, the Petition. The dam operators are wrong.

The factual bases for the Petition are apparent. The Petition states that the dams pose a threat to the environment and violate water quality standards because they kill and injure American eels and destroy eel habitat. The Petition states that dams block upstream and downstream eel passage and that turbines kill and injure eels. The Petition also notes the concern that the American eel is being extirpated and that a petition to grant the American eel "endangered species" status is currently under review by the Federal government. The Petition also states that dams exacerbate the problem of high toxicant levels in eels because dam-related deaths and injuries make the chemical body burdens of eels more bioavailable to predators like turtles, otters, and bald eagles. The Petition makes clear that the recent awareness and new information about eels is a change of circumstance requiring modification. In addition, the Petition incorporates by reference Douglas Watts' petition.

The Petition lists supporting evidence. It specifically refers to data collected from dams in Maine, other empirical data on the adverse effects of dams on eels, and government findings. The gruesome nature of eel kills and injuries--heads cut off, bodies chopped in half, decomposing bodies--are established by photographs and eyewitness accounts. Some of the evidence includes:

1. The U.S. Fish and Wildlife Service ("the Service"), in its 90-Day Finding On A Petition To List The American Eel As Threatened Or Endangered ("90-Day Finding") that initiated a status review of the species (Petition Evidence "K"), states:

> We agree with the petitioners' assertions that rivers with hydropower are a documented threat to female American eels as they leave the rivers to spawn and may be a threat to the species as a whole. Although hydropower turbines are on less than 7 percent of the rivers, this mortality may be playing a larger role as the population declines (because as the population declines, gravid females become a vital resource and a high percentage of these individuals are lost to hydropower turbines). Additionally, not all hydroelectric power facilities are currently equipped with structures that ensure safe upstream and downstream passage.

70 Fed. Reg. 38,859 (2005).

2. The Service states on its website (Petition Evidence "U")[1]:

> American eels . . . have been especially impacted by dams and other obstructions in rivers [and] hydropower plants . . . American eel populations are already in decline and the eel could become scarce and could even disappear if current trends continue.

3. Eels are attracted to the current drawn by the turbines while migrating at night. December 14, 1994 account by Frederick W. Kircheis of the Maine Department of Inland Fisheries & Wildlife of meetings with eel harvesters (Watts Kennebec Petition, p.16; Watts Androscoggin Petition, pp. 10-11).

4. Studies have established that eel mortality and injury (sublethal) rates can be as high as 100%. Reported in McCleave, Simulation of the Impact of Dams and Fishing Weirs on Reproductive Potential of Silver-Phase American Eels in the Kennebec River Basin, Maine, *North American Journal of Fisheries Management*, 21:592, 593 (2001) (Petition Evidence "C").

5. Gail Wippelhauser of the Department of Marine Resources stated that severe eel kills like the one at Benton Falls are "probably happening at every hydro facility on the East Coast that has a run of eels." Northern Sky News, November 2004 (Watts Kennebec Petition, p. 19; Watts Androscoggin Petition, p. 13).

6. A DMR study of downstream migration at Lockwood found that despite the presence of a bypass, two of five (40%) radio-tagged eels migrated through the turbines "and were presumed to be injured or dead." Kennebec River Diadromous Fish Restoration Annual Report 2002, p. 63 (Petition Evidence "B"). Turbine kills at Benton Falls have also been well documented. E.g., Kennebec River Diadromous Fish Restoration Annual Report 2001, p. 37 (Petition Evidence "B"). DMR studies of downstream migration in 2003 and 2004 failed and did not generate any data.

[1]The U.S. Fish and Wildlife American Eel web site is linked to the Friends of Merrymeeting Bay web site, which is Petition Evidence "U."

7. FOMB has recovered eels killed by dam turbines (the Petition, p. 3). Photographs show horrible eel deaths and injuries (Petition Evidence "A" and "U"). See also Watts Petition photographs.

8. According to the Service, blocked upstream migration "may present increased risks of predation (predation may be significant at the blockage where predatory fish may congregate)." The Service also found that "the decline in the American eel may be in some part attributable to the loss of upper tributary habitat for female eel, and if not responsible for the decline initially, *may well be a limiting factor as population numbers decrease.*" 90-Day Finding, p. 38,855 (Petition Evidence "K") (emphasis added).

9. The Service has stated that safe upstream and downstream passage is considered "standard" when hydropower licenses are required. It also found: "However, not all hydroelectric power facilities are currently equipped with structures that ensure safe upstream and downstream passage." 90-Day Finding, p. 38,858 (Petition Evidence "K").

10. In 2001, DMR found upstream passage hindered at Hydro-Kennebec, Shawmut, and Weston and recommended installation of upstream eel passages. Kennebec River Diadromous Fish Restoration Annual Report 2001, pp. 34-35 (Petition Evidence "B"). In 2002, DMR found that upstream eel passage at Lockwood was hindered by leakage of the dam. Kennebec River Diadromous Fish Restoration Annual Report 2002, p. 55 (Petition Evidence "B"). In 2003, DMR found upstream passage problems at Hydro-Kennebec, Shawmut, Weston, and Lockwood. Kennebec River Diadromous Fish Restoration Annual Report 2003, pp. 44-45 (Petition Evidence "B"). In 2004, DMR found upstream passage problems at Lockwood and Weston. Kennebec River Diadromous Fish Restoration Annual Report 2004, p. 25 (Petition Evidence "B").

11. Measures to facilitate safe upstream and downstream passage are being implemented at other dams. June 17, 2005 letter from Dana Murch of DEP to Watts and others (Petition Evidence "I"). Deep sluice gates are used at the American Tissue Project; nighttime shutdowns occur at S.D Warren dams during eel migration season; hydroacoustic monitoring which can trigger a shutdown is being installed at the Anson and Abenaki Projects; and etc.

12. The United States is lagging when it comes to eel protection measures. The Environment Agency of the United Kingdom has already produced a study setting forth design criteria and best practice designs for eel passage. U.K. Environment Agency, Manual for provision of upstream migration facilities for Eel and Elver, Science Report SC020075/SR2(2004) ("Manual")(Petition Evidence "H"). The study states that with respect to the effect of man-made barriers on eels, "there is no doubt that production is restricted by eels being denied access to areas that they could formerly colonise." Manual, p.1. The study also found: "Turbine mortality can be high for adult eels, largely because of their elongated form." Manual, p. 33.

13. Miller Hydro Group argues that the extent of the eel population at Worumbo is not known and suggests that it is impossible to assess any harm to eels at that site as a result. However, the U.S. Fish and Wildlife Service Gulf of Maine Program issued a map on October 20, 2005 titled, "American Eel Distribution and Dam Locations in the Merrymeeting Bay Watershed (Androscoggin and Kennebec River Watersheds)." (Petition Evidence "U;" linked to FOMB site). This map shows that American eels have been found on the entire length of the Androscoggin and Kennebec Rivers and their tributaries. The types of harms from dams on the Androscoggin will be the same as from those on the Kennebec, as eels attempt to move up or down rivers.

This and other evidence listed in the Petition clearly support FOMB's contention that the Kennebec dams pose a threat to the environment and cause violations of water quality standards and the State's anti-degradation policy.[2]

[2]The dams at issue are located on waters classified as "B" and "C". Class B waters "shall be of such quality that they are suitable for the designated uses of . . . recreation in and on the water . . . and as habitat for fish and other aquatic life. The habitat must be characterized as unimpaired." 38 M.R.S.A. § 465(3)(A). "Discharges to Class B waters may not cause adverse impact to aquatic life in that the receiving waters must be of sufficient quality to support all aquatic species indigenous to the receiving water without detrimental changes in the resident biological community." 38 M.R.S.A. § 465(3)(C). Class C waters "shall be of such quality that they are suitable for the designated uses of . . . recreation in and on the water . . . and as a habitat for fish and other aquatic life." 38 M.R.S.A. § 465(4)(A). Discharges to Class C waters may cause some changes to aquatic life, except that the receiving waters must be of sufficient quality to support all species of fish indigenous to the receiving waters and maintain the structure and function of the resident biological community." 38 M.R.S.A. § 465(4)(C). Killing and injuring eels do not satisfy these standards. Also, killing and injuring eels violates the State's antidegradation law, which provides: "Existing in-stream water uses and the level of water quality necessary to protect those existing uses must be maintained and protected." 38 M.R.S.A. § 464(4)(F). Also, the antidegradation law provides that water quality certifications can be issued only if the standards of the water quality classification are met and the project does not cause or contribute to a failure of those standards. 38 M.R.S.A. § 464(4)(F)(3).

Aside from the evidence detailed above, the dam operators undercut their claim that the Petition does not provide specific evidence of harm to eels because (a) the KHDG Agreement which the dam operators focus on (discussed in greater detail below) acknowledges that upstream and downstream passage for eels is a problem that must be addressed, and (b) the dam operators themselves admit that Department of Marine Resources Commissioner Lapointe informed them "that effective downstream eel passage at their respective projects is an important issue that warrants continuing attention." Opposition of FPL Energy Maine Hydro, et al. to FOMB and Watts Petition, p. 11. The real issue is that seven years after the KHDG agreement was entered into, there are still no implemented solutions to the eel passage problems.

It should be noted that the failure of dam operators and the State to conduct eel studies on the Androscoggin River does not preclude the Board from determining that eel protection measures need to be added to the water quality certifications for the Androscoggin dams. The Board can use the evidence it has--including the evidence of upstream and downstream eel passage problems at the dams on the Kennebec, which have been the most extensively studied--to make a reasonable conclusion that dam operations pose a significant threat to the American eel and that, therefore, modification of the water quality certifications is warranted. The Board has no trouble drawing conclusions from available scientific evidence when that evidence is not site-specific. For instance, in the case of the salmon aquaculture general MEPDES permit, which is applicable to almost every salmon farm in Maine, the Board banned non-North American fish from being grown. The Board did this because government scientists and others determined that if non-North American fish escape from net pens, such fish could breed with wild fish, their offspring would be less likely to survive, and the wild salmon population would decline. Studies were not conducted at each of the aquaculture facilities. No one ever tracked the offspring of a farmed and wild salmon. Conclusions were drawn based on studies conducted in Europe and Canada.[3]

Common sense dictates that if eels are present above dams then, at some age, they will have to out-migrate to spawn. FOMB

[3]To the extent the dam operators argue that a dam's water quality certification cannot be modified unless a dead or maimed eel from that particular dam is produced, they are incorrect. As the DMR Diadromous Fish Restoration Annual Reports show, the water can be too deep or other conditions may exist that prevent fishing out the dead and injured eels.

presents scientific evidence documenting the spatial extent of eels above dams. If the only way for a pregnant eel to pass downstream through a dam is through the turbines, the result is highly likely to be death and/or injury to the female and, in the case of a 75 millimeter female, the resultant loss of four to six million eggs.

II. THE KHDG AGREEMENT DOES NOT PRECLUDE THE PETITION.

FPL Energy, Merimil and Brascan argue that an agreement they (or their predecessor companies) entered into with the State and others more than seven years ago to facilitate the removal of the Edwards Dam, known as the Kennebec Hydro Developers Group ("KHDG") Agreement, precludes the Board from granting the Petition. Inexplicably, Miller Hydro Group, which does not operate a dam on the Kennebec and is not a member of the Kennebec Hydro Developers Group, also makes this argument.

The KHDG Agreement has never governed the approval of, or contents of, water quality certifications for dams on the Kennebec. To the contrary, the KHDG Agreement expressly maintained the independence of the DEP and the Board in performing their functions with respect to water quality certifications. Specifically, in the Agreement Between Members of the Kennebec Hydro Developers Group, the Kennebec Coalition, the National Marine Fisheries Service, the State of Maine, and the US Fish and Wildlife Services ("the KHDG Agreement"), the parties:

- agreed to make "formal filings to the Maine DEP requesting that the Maine DEP immediately incorporate all applicable terms of the final settlement Agreement into existing or proposed water quality certifications for the hydropower facilities owned by KHDG member" (§ III.B);

- expressly contemplated the possibilities that the DEP would not issue new water quality certifications or would issue certifications with different conditions, and provided that the comprehensive settlement would be "null and void" in such circumstances (§ III.C.1.).

Dam operators and others party to the KHDG Agreement confirmed to the Federal Energy Regulatory Commission ("FERC") that if they could not secure the water quality certification terms they wanted from the DEP, "the KHDG Agreement regarding amendment of fish passage obligations will become null and void." Lower

Kennebec River Comprehensive Hydropower Settlement Accord, § V.B. The water quality certifications themselves do not state that they are incapable of being modified by the Board. Rather, the Kennebec certifications provide that if the dam owners and various resource agencies (the DEP and the Board are not among those agencies) cannot agree on safe eel passage measures, the owners or the agencies can, if they choose, petition the DEP to approve "appropriate conditions relating to eel passage . . ." E.g., Lockwood Hydro Project Water Quality Certification, #L-20218-33-C-N, p. 13, § 3(B)(1)-(5).

It is logical that the KHDG Agreement--to which the DEP and the Board were not parties--did not purport to bargain away the functions and responsibilities of the Board. Such an agreement would be "contrary to public policy" and therefore "void as nonenforceable." E.g., Lewiston Firefighters Association v. City of Lewiston, 354 A.2d 154, 163 (Me. 1976); Court v. Kiesman, 2004 ME 72 (2004); Lehigh v. The Pittston Company, 456 A.2d 355 (Me. 1983); see, President and Trustees of Bates College v. Congregation Beth Abraham, 2001 Me Super. LEXIS 22, * 14-15 (Androscoggin Co. Super. Ct. Feb. 13, 2001) (courts will not enforce contracts "which are in contravention of the positive legislation of the state"). The Legislature in 38 M.R.S.A. § 341-D(3) provided that the Board has the power to modify water quality certifications when it finds that one of the criteria is met. The State cannot give away that power and abdicate its ability to protect Maine's resources on behalf of the public.

Because the KHDG Agreement does not take away the power of the Board to modify Kennebec dam water quality certifications, *the Petition is not a challenge to the KHDG Agreement,* as the dam operators contend. Rather, the Petition asks the Board to exercise its discretion in a manner that is *consistent* with the independent role of the DEP and the Board that was contemplated in the KHDG Agreement.

Nor would it be unfair, as the dam operators suggest, for the Board to decide that stricter eel and fish passage requirements are now necessary. To begin with, the dam operators that entered into the KHDG Agreement did not enter into an agreement that restricts the Board's power, so they (and the companies that bought them later) are in no position to complain about the limits of their bargain. Moreover, the KHDG Agreement does not actually require permanent solutions to upstream and downstream passage problems for eels. All the Agreement requires is that dam operators and the various resource agencies try to

reach a consensus on solutions, KHDG Agreement § III.G.3, which has not been reached. It is not tenable for the dam operators to claim that the public must be consigned to a state of non-consensus limbo, and forced to the sidelines while--more than seven years after the KHDG Agreement was signed--upstream and downstream eel passage problems remain unresolved. The unsoundness of the dam owners' claim is compounded by the fact that the water quality certifications allow the dam owners themselves to submit the very type of petition that FOMB has submitted.

III. IT IS NOT TRUE THAT WATER QUALITY CERTIFICATIONS ARE IMPERMISSIBLE SUBJECTS OF MODIFICATION PROCEEDINGS.

FPL Energy Maine and Merimil argue that once a water quality certification is issued and FERC incorporates it into a license, "it is the federal agency that has regulatory oversight over the WQC [water quality certification] through the terms of the federal permit or license. A WQC is not like a permit, which imposes ongoing obligations independent of any other permit." The dam operators argue that modification of a water quality certification requires FERC approval and that "[o]nce the FERC licenses have been issued in reliance upon the WQCs, the WQCs . . . may not be revoked, modified or suspended." FPL Energy Opposition to Kennebec Petitions, pp. 16-17; see, also, FPL Energy Opposition to Androscoggin Petition, pp. 15-16.

The dam operators misapprehend the legal significance of a water quality certification. First, water quality certifications *do* impose ongoing independent obligations. The DEP and the Board have the power to enforce their own water quality certifications, even if they cannot enforce the terms of FERC licenses. For example, the DEP enforced a violation of a water quality certification issued to Benton Falls Associates, a signatory to the original 1986 KHDG Agreement. The Board entered an Administrative Consent Agreement and Enforcement Order requiring Benton Falls Associates to take a variety of remedial measures as a result of alewives being killed in the turbines of Benton Falls Associates' dam on the Sebasticook River. In the Matter of Benton Falls Associates, 2000 Me. ENV. LEXIS 40 (Aug. 17, 2000).

In addition, the terms of a water quality certification are enforceable by private parties or a state in Federal court under the "citizen suit" provision of the Federal Clean Water Act. Section 505(a)(1)(A), 33 U.S.C. § 1365(a)(1)(A), of the CWA provides that private parties and states may commence a civil

action against any person "who is alleged to be in violation of an effluent standard or limitation under this chapter . . ."[4] Section 505(f) of the CWA, 33 U.S.C. § 1365(f)(5), provides:

> For purposes of this section, the term "effluent standard or limitation under this chapter" means . . .(5) certification under section 1341 [401] of this title.

Thus, a citizen suit can be brought against any person who is alleged to be in violation of a certification under section 401. North Carolina Shellfish Growers Association v. Holly Ridge Associates, 200 F. Supp. 2d 551, 558 (E.D.N.C. 2001). Since certifications include conditions to protect water quality, those certifications can be enforced.

Second, it is not true that a water quality certification can no longer be modified once a FERC license is issued. The DEP, in its response to comments on the Gulf Island-Deer Rips Hydro project, stated that the Board always has the authority under 38 M.R.S.A. § 341-D(3) to modify a water quality certification. FPL Energy Maine Hydro LLC Water Quality Certification of Gulf Island-Deer Rips Hydro Project, #L-17100-33-O-N, § 11.n. Similarly, a water quality certification need not contain specific "reopener" language to be modified, as the Gulf Island-Deer Rips water quality certification made clear. Id. (The DEP specifically rejected the idea that a reopener clause is required to modify water quality certifications).

Third, even if FERC licenses can be amended only upon the consent of FERC and the licensee, modification of a water quality certification may lead to FERC opening discussions with the licensee to modify the license to incorporate the new certification. One reason comes to mind as to why this may occur with Kennebec dam licensees. The American eel may be headed for inclusion on the Federal Endangered Species List. One factor that U.S. Fish and Wildlife will be considering in deciding whether to list the American eel is "the inadequacy of existing regulatory mechanisms." 70 Fed. Reg. 38,849 (2005). As

[4]"Citizen" is defined as "a person or persons having an interest which is or may be adversely affected," 33 U.S.C. § 1365(g), and "person" is defined to include an " individual, corporation . . . association, State . . . or political subdivision of a state . . .", 33 U.S.C. § 1362(5).

experience with the Atlantic salmon listing fight shows, regulated entities and the State may seek to shore up weak regulatory protection of a species in order to argue to the Federal government that the "existing regulatory mechanisms" factor does not weigh in favor of listing. Amendment of the water quality certification and ultimately the FERC license certainly may be on the horizon for this reason.

The dam operators try to attach significance to the fact that a petition to modify was filed instead of appeals of water quality certifications. However, there is nothing in either the statute or the Board rules that restricts when a petition to modify can be filed. In addition, some of the water quality certifications are very old, and a lot more information about eels has been generated since they were issued. In any event, it is not feasible for citizens to appeal every water quality certification; consolidated proceedings on a request to modify certifications is the most practical way for the concerned public to address the issues presented here.

IV. ECONOMIC IMPACT IS NOT A FACTOR TO CONSIDER IN MAKING A DECISION ON MODIFICAITON.

Miller Hydro Group argues that FOMB's Petition does not discuss or present evidence with respect to cost of eel protection measures and, therefore, should be dismissed. Ch. 2, § 27 sets forth the criteria to be evaluated in determining whether to modify a water quality certification. Economics is not one of those criteria. Further, conditions for water quality certifications do not take into account the costs of measures necessary to achieve compliance with water quality standards. 38 M.R.S.A. § 464(F)(3).

In any event, the Petition provides evidence that eel protection measures, such as deep gates and night time shutdowns are economically feasible. Other dam operators have implemented these measures. June 17, 2005 letter from Dana Murch of DEP to Watts and others (Petition Ex. "I").

V. FOMB HAS STANDING.

Miller Hydro argues that FOMB does not have standing because you have not presented evidence of harm to any species from the

Worumbo Project on the Androscoggin and you have not documented any harm to FOMB.

As mentioned above, the U.S. Fish and Wildlife map establishes the presence of eels in the Androscoggin. The Board can use information on the types of harm to eels at other dams and conclude the same types of harm are occurring on the Androscoggin.

With respect to harm to FOMB, Ch. 2, § 27 of the DEP Rules provides that "any person" may petition the Board to revoke, modify or suspend a license. To the extent this is construed as limited to any person who can demonstrate a particular interest is harmed, it is settled that harm to aesthetic, environmental or recreational interests confers standing. Fitzgerald v. Baxter State Park Authority, 385 A.2d 189, 196-97 (Me. 1978) (citing Sierra Club v. Morton, 405 U.S. 727 (1972) (plaintiffs who were users of State park and who intended to use it in the future had standing to enjoin Park Authority from clearing timber blowdown). As detailed in FOMB's website (Petition Evidence "U), FOMB is a non-profit organization dedicated to protecting the ecological, aesthetic, historical, recreational, and commercial values of Merrymeeting Bay. FOMB works to preserve, protect and preserve ecosystems of Merrymeeting Bay through education, conservation and stewardship, membership events, and research and advocacy. The geographic area of concern for FOMB is the mid-coast Maine riverine delta consisting of the Kennebec, Androscoggin, Cathance, Muddy, Eastern, and Abbagadasset Rivers and surrounding towns. FOMB has over 300 members who use and enjoy these rivers. FOMB members are concerned about the declining American eel population and the threats to the eel in the Kennebec and Androscoggin Rivers, and FOMB has been active in eel issues from both educational and advocacy standpoints.

Thank you for your consideration of this letter.

Sincerely,

/s/ Bruce M. Merrill

Bruce M. Merrill

cc: Kennebec and Androscoggin service lists