

Matthew D. Manahan

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VIA HAND DELIVERY

January 17, 2007

Matt Scott, Presiding Officer c/o Terry Hanson Board of Environmental Protection 17 State House Station Augusta, ME 04333

RE: Petitions to Modify, Hydro-Kennebec Project, #L-11244-35-A-N

Dear Mr. Scott:

On behalf of Hydro Kennebec Limited Partnership, I enclose the original and 12 copies of the sworn pre-filed direct testimony of Brian R. Stetson and Kevin R. Bernier. As required by the Third Procedural Order, we are providing paper copies to each party on the service list. In addition, as agreed to at the second prehearing conference, we have emailed an electronic copy to the service list.

Please let me know if you have any questions about these materials.

Sincerely,

Matthew D. Mananan

Enclosures (original and 12 copies)

cc:

12-15-06 Service List

STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

IN THE MATTER OF

Hydro Kennebec Limited Partnership)	Petitions for Modification,
Waterville and Winslow, Kennebec Co.)	Revocation, or Suspension
#L-11244-35-A-N)	-

AFFIDAVIT OF BRIAN R. STETSON

- 1. My name is Brian R. Stetson. I received a Bachelor of Science degree from the University of Maine in 1978 and am a licensed professional forester. Since 2005, I have been the General Manager for Brookfield Power New England Northern Region. As General Manager, among other things, I am responsible for all safety, environmental, and regulatory compliance issues arising in connection with the operation and maintenance of Brookfield Power's hydroelectric projects on the Kennebec, and Penobscot rivers in Maine.
- I have been involved with environmental and regulatory compliance, including fish passage, fisheries restoration, and water quality issues before the Maine Department of Environmental Protection and the Federal Energy Regulatory Commission arising in connection with hydroelectric projects for over 15 years. From 1977 2003 I was employed at Great Northern Paper where, among other things, I was responsible for regulatory and environmental compliance and directed licensing activities and environmental studies for Great Northern Paper's hydroelectric system on the Penobscot River. From 2003 2005 I was the Northeast Regional Director for Devine Tarbell & Associates, a national engineering, environmental, regulatory, and management consulting services firm that provides assistance to the energy industry, including the hydroelectric industry.

Attached hereto as Exhibit GLH-1 is Brookfield Power New England's
 Analysis of Kennebec River Eel and Anadromous Fish Passage, dated January 17, 2007,
 which constitutes my sworn pre-filed direct testimony in this matter.

Brian R. Stetson

Date: 1 12 07

STATE OF MAINE

January 12, 2007

Personally appeared the above-named Brian R. Stetson before me, and swore to the truth of the above statements and information based upon his personal knowledge and, where indicated, on information and belief, which information he believes to be true.

1100019 1 00110

Print Name:

My commission expires:

Notary Public, Maine My Commission Expires 01/13/08

STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

IN THE MATTER OF

Hydro Kennebec Limited Partnership)	Petitions for Modification,
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#L-11244-35-A-N)	

AFFIDAVIT OF KEVIN R. BERNIER

- 1. My name is Kevin R. Bernier. I received a Bachelor of Science degree in Wildlife Management and a Bachelor of Arts degree in Mathematics from the University of Maine at Orono in 1982 and 1983, respectively. Since 2002, I have been the Environmental and FERC Compliance Specialist for Brookfield Power New England. Among other things, I am responsible for coordinating and overseeing all environmental and regulatory compliance issues arising in connection with the operation and maintenance of Brookfield Power's hydroelectric projects on the Androscoggin, Kennebec, Deerfield and Penobscot rivers in Maine, New Hampshire, and Massachusetts. From 1983 to 2002, I worked as a fisheries biologist, responsible for fisheries studies and fisheries restoration issues in connection with Great Northern Paper's proposed and existing hydroelectric and storage dams on the Penobscot River. I have worked on fish passage, fisheries restoration, and water quality issues in connection with hydroelectric projects in Maine for over 20 years.
- 2. Attached hereto as Exhibit GLH-1 is Brookfield Power New England's Analysis of Kennebec River Eel and Anadromous Fish Passage, dated January 17, 2007, which constitutes my sworn pre-filed direct testimony in this matter.

Devin R. Bernier Kevin R. Bernier

Date: 1/12/07
STATE OF MAINE

January 12, 2007

Personally appeared the above-named Kevin R. Bernier before me, and swore to the truth of the above statements and information based upon his personal knowledge and, where indicated, on information and belief, which information he believes to be true.

Notary Public

Print Name:

My commission expires:

Vesta A. Wyman Notary Public Maine

My Commission Exoles 01/13/08

Analysis of Kennebec River Eel and Anadromous Fish Passage By Brian R. Stetson and Kevin R. Bernier Hydro Kennebec L.P. January 17, 2007

Introduction

Brookfield Power New England (BPNE) submits this testimony in response to petitions filed by the Friends of Merrymeeting Bay and Douglas Watts. The petitioners assert that the Board should reopen/modify the Water Quality Certification issued for the Hydro-Kennebec facility to require certain actions to protect anadromous and catadromous fish.

BPNE respectfully requests that the Board of Environmental Protection (BEP) dismiss these petitions. License requirements are currently in place to address all issues raised by the petitioners, who have failed to provide any new evidence that additional measures are necessary or warranted at the Hydro-Kennebec facility.¹

The operation of the projects does not pose a threat to American eels (catadromous fish) or anadromous fish. There is in place today upstream and downstream passage at Hydro Kennebec meeting the fisheries restoration goals established in the May 1998 Kennebec Hydro Developers Group Agreement (KHDG Agreement or Settlement), and as required in the existing Federal Energy Regulatory Commission (FERC) license and State of Maine Water Quality Certification.

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¹ Federal Energy Regulatory Commission (FERC) Project No. 2611 license and associated 401 Water Quality Certification.

Background

On January 20, 2005, subsidiaries of Brascan Power (now Brookfield Power) acquired the partnership interests in Hydro Kennebec L.P., owner of the hydroelectric generating assets at the Hydro Kennebec Project. Although Hydro Kennebec L.P. is the co-licensee for the Hydro Kennebec Project, BPNE (also a subsidiary of Brookfield Power) operates and oversees the project, along with other Brookfield Power hydro assets in New England.

BPNE purchased the facility with the knowledge that, through the 1998 KHDG Agreement, a plan for the development of upstream and downstream fish passage had been developed in a collaborative process in consultation with a coalition including American Rivers, Atlantic Salmon Commission, Kennebec Valley Chapter of Trout Unlimited, Natural Resources Council of Maine, Trout Unlimited, Central Maine Power, Merimil Limited Partnership, UAH-Hydro Partners, Benton Falls Associates, Ridgewood Maine Hydro Partners, National Fish and Wildlife Foundation, Maine Department of Marine Resources (DMR), Maine Department of Inlands Fisheries and Wildlife (IF&W), Maine State Planning Office, U.S. Department of Commerce, and the U.S Department of Interior. The Settlement was intended to resolve all issues related to the relicensing and ultimate removal of Edwards Dam and the proceedings relating to fish passage on seven hydro-electric facilities on the Kennebec and Sebasticook rivers, including Hydro Kennebec. The Settlement also established that consultation among the parties would continue throughout the term of the Settlement with respect to fish passage measures, facilities, and studies at each of the seven hydro-electric facilities.

The Settlement established provisions for the installation of upstream and downstream passages at these facilities. These provisions for the Hydro-Kennebec facility, which were incorporated into the Department of Environmental Protection's (DEP's) Water Quality Certification and into a September 16, 1998 FERC order and license amendment approving the Settlement, include:

- Studies and implementation of upstream and downstream passage for American eels;
- Fishery studies to be conducted by the state and federal agencies funded by the owners of these hydroelectric facilities;
- Consultation with state and federal agencies in the development of interim upstream and downstream passage facilities and/or operational measures to minimize impacts to downstream migrating fish;
- Consultation with fish and wildlife agencies to develop an interim plan to
 minimize impacts on post-spawning, downstream migrating adult shad beginning
 in 2006, due to the anticipated completion of a fish lift at the downstream
 Lockwood Dam;
- Studies to be conducted prior to the date that permanent downstream passage facilities are in operation to determine the effectiveness of various downstream passage techniques;
- Permanent downstream passage facilities to be operational when permanent upstream passage is operational;
- Installation of permanent upstream fish passage two years following the occurrence of 8,000 American shad in any single season captured at the fish lift facility at the downstream Lockwood Project or following the occurrence of a biological assessment trigger for salmon or river herring that demonstrates the need for a permanent upstream fish passage facility. In no event would permanent upstream fish passage be required before May 1, 2010; and
- Contribution of a pro rata share of \$4.75 million to the State of Maine c/o the National Fish and Wildlife Foundation for fisheries restoration on the Kennebec River.

BPNE also understood that there was an informal agreement between Hydro Kennebec L.P. and the United States Fish and Wildlife Service (USFW) for providing downstream adult American shad passage by notching the top of the flashboards in several places as a first step to provide a downstream passage route (4' wide slots, 8-10" deep, with discharges to the tailrace pool for safe passage). Behavioral barriers would then be

installed as a second step from the log booms (if needed). This interim system would be monitored qualitatively (by looking for dead fish and bird activity downstream).

In regard to the American eel, BPNE made the January 2005 acquisition with the understanding that an innovative upstream eel passageway had been installed and monitored at Hydro Kennebec the previous year in close cooperation with the DMR. This final eel passageway followed two years of experimental upstream eel passage designs. DMR and Hydro Kennebec personnel were pleased with the 2004 design and eel passage, when over 7,800 eels used the upstream eel passageway.

BPNE also understood that the Settlement required Hydro Kennebec L.P. to consult with the resource agencies and undertake cost-effective measures to minimize downstream eel mortality at the Hydro Kennebec facility, but only if studies indicated that interim downstream American eel passage measures are needed to avoid significant downstream turbine injury and/or mortality. There is no site-specific information related to the Hydro Kennebec facility documenting significant eel injury or mortality from downstream turbine passage.

American Eels in Maine

Eel Spawning

American eels are unique in that they have a "catadromous" life cycle, that is, they spawn in the ocean and migrate to fresh water to grow to adult size. As adult eels mature, they leave fresh water in the fall (August to November), migrate to the Sargasso Sea and spawn during the late winter. The Sargasso Sea is a large area of the western North Atlantic Ocean located east of the Bahamas and south of Bermuda. After spawning, adult eels die. The eggs hatch after several days and develop into a larval stage, drift in the ocean for several months, and then enter the Gulf Stream current to be carried north toward the North American continent.

As they approach the continental shelf, the larvae transform into miniature transparent eels called "glass eels." As glass eels leave the open ocean to enter estuaries and ascend rivers they are known as elvers. This migration occurs in late winter, early spring, and throughout the summer months. Some elvers may remain in brackish waters, while others ascend rivers far inland. Eels may stay in growing areas from 8-25 years before migrating back to sea to spawn.

Regulation of American Eels in Maine

IF&W oversees fisheries management and fishing regulations for Maine's inland waters. Anglers are currently limited to a bag limit of 50 American eels per day in Maine, with a minimum length limit of 6 inches. In addition, any licensed trapper in the State of Maine is eligible for a free annual permit from IF&W to take up to 20 pounds of eels, by eel pots or hook and line only, for the purpose of baiting traps.

DMR oversees fisheries management and fishing regulations for Maine's coastal, marine, and estuarine waters. DMR also tracks eel and elver (upstream-migrating juvenile eels) landings in the State. As can be seen in Exhibit GLH-2 (from DMR's website), adult eel landings peaked in the 1970's at over 150,000 pounds per year. Eel landings then dropped dramatically in the late 1970's, and have remained in the range of about 12,000 – 65,000 pounds annually for the last 25 years. Adult yellow eels (non-mature eels that live in fresh water) are typically caught using baited eel pots and fyke nets. Adult silver eels (downstream-migrating, sexually mature eels) are trapped in the late summer and fall using weirs across streams and rivers. Yellow and silver eel fisheries have occurred in Maine since colonial times.

Exhibit GLH-3 shows elver landings since 1994. As can be seen by this graph, elver landings have varied considerably over the past 10 years, with a high of over 16,000 pounds in 1995 to a low of less than 1,000 pounds in 2000. The elver fishery in Maine is very recent compared to the adult eel fisheries, having only begun in the early 1970's. In Maine, this fishery utilizes fine mesh fyke nets or dip nets to collect elvers as they move

upstream. Although the elver catch was virtually nonexistent from 1979 to the early 1990's due to low market demand, Far East (China, Japan, Korea, Taiwan) demand has increased dramatically for elvers over the past three years. This increased demand has renewed concerns that eels may be over harvested.

Downstream American Eel Passage at Hydro Kennebec

Qualitative Studies

In 2001, 2002, and 2003, Hydro Kennebec personnel and biologists from Normandeau Associates conducted extensive qualitative studies (required by the Settlement) to evaluate downstream passage of clupeids (primarily juvenile shad and alewife). Visual observations were made 2 or 3 times per day, 5 days per week, from June 15 to November 30, of the areas above and below Hydro Kennebec for evidence of fish mortality. Although thousands (and maybe millions) of fish were observed, and some cormorant and smallmouth bass predation was noted in the dam's headpond, there was no evidence (dead fish, bird activity) of clupeid mortality downstream of Hydro Kennebec. In fact, there was no evidence of any turbine mortality to fish, including American eels, observed during this study. The study was discontinued in 2004, per agreement with the fisheries resource agencies.

Consultation

Despite the lack of observed downstream fish mortality in the 2001 – 2003 studies, the potential presence of adult shad beginning in 2006 (due to the anticipated completion of a fish lift at the downstream Lockwood Dam) required that BPNE consult with resource agencies and develop an interim plan to minimize impacts on post-spawning, adult shad during their downstream migration. Thus, shortly after acquisition of the Hydro-Kennebec Project, BPNE initiated consultations with state and federal fish and wildlife agencies on the issue of downstream fish passage at Hydro Kennebec.

On August 3, 2006, an interim downstream fish passage began operation at Hydro Kennebec and was operational through the fall migration period for American eel. The design of the downstream fish passage facility was developed in a collaborative process involving BPNE, BPNE's consultant Lakeside Engineering, Inc., F&WS, Maine Atlantic Salmon Commission, and DMR.

During the initial agency consultation meetings with the F&WS, Maine Atlantic Salmon Commission, and DMR, it became apparent that some of BPNE's understandings regarding downstream passage issues at Hydro Kennebec were incorrect: resource agencies were seeking not only interim downstream passage for adult American shad, but also for migratory species such as Atlantic salmon and American eel; and flashboard notches would not be acceptable for providing this interim downstream passage.

During follow-up agency consultations, including site meetings held on September 21, 2005 and January 11, 2006, interim downstream fish passage options and specifications were discussed. BPNE felt that only with the construction of a downstream fish passage facility could the goal of providing effective downstream passage for adult American eel, Atlantic salmon, and American shad be accomplished.

It became clear during these consultations that a downstream bypass close to the turbine unit trashrack intakes would be required as a baseline for any interim downstream passage options, and likely would also provide a basis for any permanent downstream passage system. As a result, Hydro Kennebec L.P. proposed to the resource agencies on February 2, 2006 a conceptual plan for interim downstream passage at Hydro Kennebec that included construction of this bypass.

This plan included a 10' deep angled boom in the forebay or intake area to the hydro station leading to a 4' wide by 8' deep slot (the fish bypass) capable of passing 4% of turbine flow. The slot would be cut into the wall between the turbine intakes and the bascule gate structures, and would discharge to a plunge pool next to the powerhouse. The plunge pool in turn leads to the turbine tailrace. As seen in Exhibit GLH-4, the

purpose of the 10' deep angled boom is to establish a flow pattern in the forebay that directs migrating fish to the downstream passage. Through the use of a solid boom rather than the traditional net boom, strong currents are visible on both the upstream and downstream sides of the boom, directing fish to the downstream passage. Exhibit GLH-5 shows the water flowing through the deep slot to the plunge pool.

This system was approved by the state and federal fish and wildlife agencies in February 2006, and then by FERC on April 21, 2006. Construction of the interim downstream passage system began in the summer of 2006 on an expedited basis, and the facility began operation on August 3, 2006, prior to the 2006 eel migration season. The facility also was approved by the DEP in its water quality condition compliance order issued on September 18, 2006.

Downstream Passage Effectiveness Study

As required by the WQC and the Settlement, BPNE developed a study plan to evaluate the effectiveness of this interim facility. This study plan was approved by both FERC and the DEP in September 2006. The objective of the initial phase of the study was to determine the effectiveness of hydroacoustic systems in assessing the adult downstream fish bypass system. The initial phase of the study (to evaluate methods and equipment to achieve monitoring goals for the interim system) was completed in December 2006.

The next phase of the study is planned for 2007 and will evaluate the effectiveness of the interim downstream fish passage facility for out-migrating fish, including American eel. Along with assessing effectiveness, the methods developed in 2006 will be utilized to determine fish behavior, thus providing essential data for making decisions on further enhancements to the interim downstream passage. Hydroacoustics should also allow the assessment of downstream bypass passage and turbine passage without handling any fish, and assist in the determination of fish migration periods at Hydro Kennebec.

Although agency and BPNE representatives believe that adjustments may be needed to optimize this interim system, and to determine appropriate permanent downstream passage measures for eels and anadromous fish, all agree that the 2006 construction was an appropriate and ambitious first step for providing downstream passage to migratory species at Hydro Kennebec. The installed bypass and angled boom system will provide a basis for virtually any system refinements that are determined to be necessary from the upcoming studies, and will allow the continued generation of clean and renewable hydropower at Hydro Kennebec during downstream fish migration periods.

Upstream Anadromous Fish Passage

Interim upstream passage of anadromous fish at Hydro Kennebec is presently addressed by the Lockwood fish lift. Fish from the Lockwood lift are transported upstream and released above Hydro Kennebec. The interim fish passage facility was constructed by FPL Energy at the Lockwood Project in 2005/2006 and consists of a new fish lift with trapping, sorting, and trucking capabilities. The fish lift design criteria are 164,640 alewives, 228,471 American shad, and 4,750 Atlantic salmon.²

Numbers of Fish Passed or Trapped at Lockwood in 2006³ Season Totals

Alewife	4,094
American Shad	0
Atlantic Salmon	14
Landlocked Salmon	5
Brown Trout	1094
Rainbow Trout	17
Brook Trout	9
Lake Trout	1
Splake	2
White Sucker	104
Smallmouth Bass	162
Largemouth Bass	13
Striped Bass	62
Redbreast Sunfish	. 50
Punpkinseed Sunfish	8
Yellow Perch	121
White Perch	4
Black Crappie	1
Fallfish	1
American Eel	3
Sea Lamprey	14

² Source of information DMR, http://www.maine.gov/dmr/rm/stockenhancement/kennebec/lockwood.htm.

³ Source of information DMR, http://www.maine.gov/dmr/rm/stockenhancement/kennebec/fishpass.htm.

The Settlement requires installation of permanent upstream passage two years following the occurrence of 8,000 American shad in any single season captured at the fish lift facility at the downstream Lockwood Project, or following the occurrence of a biological assessment trigger for salmon or river herring that demonstrate the need for a permanent upstream fish passage facility. However, in no event is permanent upstream fish passage required before May 1, 2010.

The schedule described in the Settlement for installing permanent upstream fishways at the Kennebec River hydro facilities is based primarily upon the anticipated growth in population of American shad in the Kennebec River. The State's goal is to restore other anadromous species, including Atlantic salmon, Alewife, and blueback herring populations in the Kennebec River. As described in the Accord's Submittal of Comprehensive Settlement and Explanatory Statement:

The time frame for fish passage at many of the KHDG dams that was contemplated in 1987 (when obligations were first agreed upon) was based on the assumption that there would be by the late 1980s permanent fish passage at Edwards Dam. The significant delay in deciding whether to remove Edwards Dam has delayed fish restoration of several targeted species in the Kennebec River, and thus justified reconsideration of the KHDG fish passage deadlines.

The Kennebec Coalition, the NMFS, the State of Maine, and USFW believe that the most effective way to continue and accelerate the fish restoration program in the Kennebec River is both to remove the Edwards Dam as soon as possible and thereby allow certain fish species to present themselves at the upriver dams, and to fund certain activities related to the restoration of alewife, shad, and salmon. The Kennebec Coalition, the NMFS, the State of Maine, and USFW believe that certain extensions in the dates for construction of the KHDG fish passage structures are justified as part of a comprehensive settlement that addresses these and other anadromous and catadromous fish restoration objectives.⁵

(W0656570.1)

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⁴ Lower Kennebec River Comprehensive Hydropower Settlement Accord and Related Filings, May 26, 1998, at Exhibit B, Page 8, Section IV.A.

⁵ Lower Kennebec River Comprehensive Hydropower Settlement Accord And Related Filings, May 26, 1998, Submittal of Comprehensive Settlement and Explanatory Statement Pursuant to Rule 602 and Request for Expedited Consideration, at Page 5.

The measures in place have resulted in a healthy and abundant fishery for numerous species, including American eels and anadromous fish, in the waters above the Hydro Kennebec Project.

Respecting the Settlement Process

On May 26, 1998, all parties that had been actively involved in proceedings before FERC regarding the need for, design of, and timing of fish passage facilities at hydropower projects in the lower Kennebec River watershed signed a comprehensive settlement agreement. In addition to resolving disputes regarding fish passage facilities, the Settlement provided for \$4,750,000 from the hydro owners (KHDG members) for anadromous fisheries restoration in the Kennebec River, including funding for restoration of alewife, American shad, blueback herring, and Atlantic salmon, American eel studies, and costs incurred by the State of Maine in removal of Edwards dam. As of January 15, 2007, KHDG members have contributed \$4,210,000 to this funding. BPNE has contributed over \$160,000 to this funding just since the acquisition of Hydro Kennebec in January 2005.

Granting the petitioners' request to modify the Settlement and water quality certification will establish a significant precedent, which will be detrimental to future efforts to resolve issues through a collaborative process. Why would a licensee enter into a future settlement if it is possible for a group or individual to sit on the sidelines during a settlement process and later make new demands that are taken seriously by the regulators, when those very issues were addressed by the settlement? The petitioners here had an opportunity to provide comments in response to FERC's June 10, 1998 public notice (requesting comments on the Settlement) and other notices issued throughout the process, but chose to remain silent. Even if they had commented and their comments were rejected, the settlement was approved by the Department, and the legitimate settlement process should not be undermined.

BPNE recently concluded over three years of settlement discussions on the relicensing of the Storage Project on the West Branch of the Penobscot River. Those settlement discussions, like those on the Kennebec River at issue here, involved all groups that had actively participated in the licensing process. The BEP issued a water quality certification adopting that settlement in November 2004, and FERC issued a new license in December 2004. This collaborative effort on the West Branch has drawn the attention of the Maine DEP, and BPNE and the settlement group was chosen to receive a Governor's Award in the Environmental Stewardship category at an awards ceremony held on November 4, 2005. This culminated a 2 1/2 year process that began in April 1998, in which interested parties and the public had many opportunities to voice their comments. Public notices were issued by FERC and the DEP at several key milestones in the process. Can we now expect, at some date in the future, that the BEP may reopen the water quality certification for the Storage Project, even though the petitioners had ample opportunity (as on the Kennebec River) to provide comments during the relicensing process?

Conclusion

BPNE requests that the BEP dismiss these petitions because they are unnecessary for continued development of fish passage facilities and are detrimental to the restoration efforts underway on the Kennebec River because they undermine the agreement reached by the Settlement, which is favored by the resource agencies charged with protecting the fish in the river. The petitioners have failed to provide any evidence to justify dissolving the Settlement and reopening/modifying the water quality certification for the Hydro-Kennebec Project. Specifically, the petitioners did not include any evidence related to the Hydro-Kennebec facility itself, but profess to rely on the absence of evidence to justify the modification of the certification. Contrary to these claims, downstream passage studies, as specified in the Settlement, were conducted in 2001, 2002, and 2003. These studies did not reveal instances of significant injury and/or mortality to the fish species observed at the project.

⁶ FERC Project No. 2634.

Upstream and downstream passage facility plans, as specified in the Settlement, are achieving the goals of fish restoration on the Kennebec River. Hydro Kennebec LP has operated, and continues to operate, in compliance with its FERC license, water quality certification, and laws administered by the DEP.

The 1998 Kennebec Hydro Developers Group Agreement resolved all upstream and downstream passage issues. The BEP should dismiss the petitions and support the Settlement with understanding that:

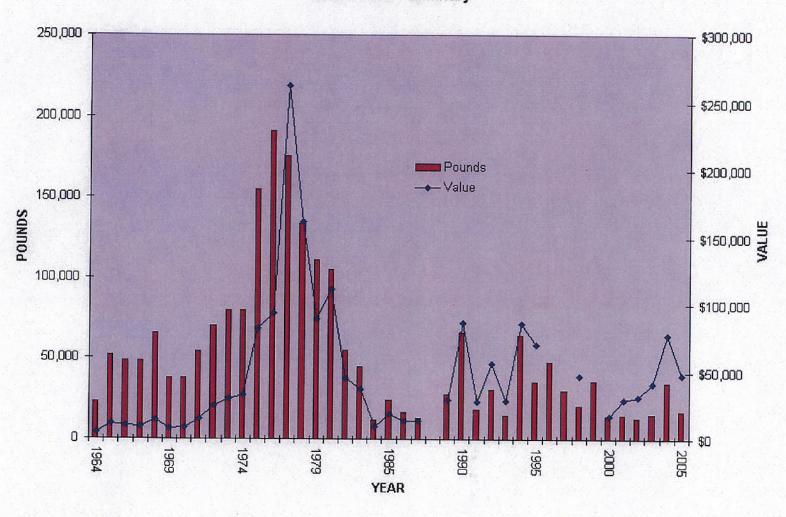
- A downstream passage facility for all fish species is in place at Hydro Kennebec and became operational in August 2006 to provide effective passage for anadromous fish and eels. Effectiveness studies that began in 2006 will continue in 2007 to determine what improvements might be necessary to meet fisheries restoration goals on the Kennebec River.
- 2. Interim upstream passage (Lockwood fish lift and Hydro Kennebec upstream eel passage) is in place to provide upstream passage for all species. Permanent upstream fish passage will be installed after May 1, 2010 when a trigger (along with permanent downstream passage facilities) of either 8,000 shad at the Lockwood trap facility or biological assessments for salmon or river herring that demonstrate the need for fishway installation is achieved.
- 3. Injury or mortality from downstream turbine passage of American eel or any other fish species has not been observed or documented at Hydro Kennebec.

The petitioners have failed to show that any of the four requirements for modification have been met at the Hydro Kennebec Project, for the reasons discussed in detail above:

- 1. The operation of the Hydro-Kennebec Project does not pose a threat to human health or the environment, and specifically to American eels or anadromous fish;
- 2. The water quality certification for the project included all standards and limitations legally required on the date it was issued, and specifically with respect

- to providing passage for American eel and anadromous fish, the petitioners have failed to cite any law or regulation to the contrary, and it would be unfair to now interpret the law to require something more than what all the resource agencies have previously determined is required;
- 3. There has been no change in any condition of circumstance since the issuance of the water quality certification that requires modification of the certification, and, specifically, there is no evidence of significant eel or fish mortality or injury at the project, or interference with the life cycles or survival of those species; and
- 4. The licensee has not violated any laws administered by the DEP, and specifically, the licensee has complied with all provisions of its certification and with the agreements reached with the resource agencies charged with protecting American eels and anadromous fish on the Kennebec River. DEP staff and fish resource agencies believe the condition compliance orders satisfactorily address these issues, and FERC believes the licensee is in compliance.

STATE OF MAINE ADULT AMERICAN EEL LANDINGS *2005 Data Preliminary*



STATE OF MAINE ELVER LANDINGS *2005 Data Preliminary*

