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CERTIFICATION HANDBOOK

including

MATERIALS NEEDED IN APPLYING FOR CERTIFICATION

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LOW IMPACT HYDROPOWER HANDBOOK

-- PART I -- INTRODUCTION

The Low Impact Hydropower Institute (“Institute” or “LIHI”) has established a Low Impact Hydropower Certification Program (“Certification Program”) to certify hydropower facilities with impacts that are low compared to other hydropower facilities based on objective environmental criteria. The Certification Program’s goals are to reduce the environmental impacts of hydropower generation, and to create a credible and accepted standard for consumers to use in evaluating hydropower. For a hydropower facility to be certified as low impact, objective certification criteria must be met in the following eight areas: (1) river flows, (2) water quality, (3) fish passage and protection, (4) watershed protection, (5) threatened and endangered species protection, (6) cultural resource protection, (7) recreation, and (8) facilities recommended for removal. A hydropower facility meeting the eight certification criteria will be certified as a Low Impact Hydropower facility, and will be able to use this certification when marketing power to consumers.

I. WHY CREATE A LOW IMPACT HYDROPOWER CERTIFICATION PROGRAM?

In the new world of consumer choice being created through electric power industry restructuring, environmentally preferable electric power is one of the markets developing first. From early evidence in California and Pennsylvania, energy from wind, solar, geothermal, biomass and hydropower are attractive to many consumers. But consumers often have questions about the specifics of various generation sources, including hydropower. What generation is environmentally preferable and what is not?

For many knowledgeable consumers, hydropower raises issues. They understand that hydropower dams have both positive and negative environmental impacts. Hydropower dams provide public benefits such as flood control, recreation, water supply, irrigation and the offset of fossil fuel and other power sources that generate air pollution and greenhouse gas emissions. But hydropower dams also have environmental impacts, such as flooding river habitat, blocking fish passage, altering natural flow cycles, and degrading water quality. If a dam is well sited and well operated, these environmental impacts can be reduced, though not eliminated. Consumers are seeking a credible means to determine which hydropower facilities are well sited and well operated and thus provide the benefits of the hydropower while minimizing the dam’s environmental impacts.

In some states where the issue of distinguishing hydropower’s benefits and impacts has been addressed legislatively, an interim solution used (based on PURPA’s Qualifying Facility definition) is size. Small hydropower (less than an arbitrary cutoff, usually 30 megawatts) is defined as renewable. But this size criterion is a poor indicator of the environmental impacts of a hydropower facility. For example, small facilities that de-water river reaches and block fish passage may be more environmentally destructive than larger facilities designed and operated to

reduce environmental impacts. Under this size criterion, a dam is either renewable or not – a small dam can be operated in a way that is harmful to the environment and be considered renewable, while a large dam can undergo major changes to reduce the environmental impacts of its operation without being considered renewable.

In addition, a small hydro criterion automatically certifies the majority of hydropower *dams* in the country, but eliminates from consideration the majority of the country's hydropower *capacity*. Of the over 2,000 hydropower dams in the US owned by entities other than the federal government, approximately 89% of the *dams* are “small” (less than 30 megawatts capacity), but together they only provide only 8% of the hydropower *capacity*. The remaining 11% of the dams produce 92% of the hydropower capacity. Thus, under the small hydro approach, we are classifying as environmentally preferable a large number of dams but not a large amount of power, and we are granting that preferred status without any examination of the operation or actual environmental impacts of those dams.

To respond to the need for an impact-based evaluation of hydropower dams, the Low Impact Hydropower Institute was established to create a voluntary program to certify hydropower facilities with environmental impacts that are low compared to other hydropower facilities based on objective environmental criteria. This distinction allows well sited and well operated hydropower dams to gain a market advantage for the benefits that hydropower dams provide.

The Low Impact Hydropower Institute's Certification Program (“LIHI Certification Program”) evaluates the siting and operation of hydropower dams based on objective environmental criteria. The Institute has identified eight key areas that provide a reasonable approximation of the environmental impacts of a facility. The LIHI Certification Program establishes basic objective criteria for each of these eight areas. Because every dam and every river is different, it is not possible for objective standards to delineate with 100% accuracy all low impact hydropower facilities. However, the Low Impact Hydropower Institute's criteria are a good means of identifying those facilities whose siting and operation minimize the dam's environmental impacts.

II. PROGRAM GOALS AND OBJECTIVES

A. Program Goals:

The LIHI Certification Program has two equally important fundamental goals: (1) Reducing the environmental impacts of hydropower generation; by (2) Creating a credible and accepted standard for consumers to use in evaluating hydropower.

1. Reduce the environmental impacts of hydropower generation: A goal of the LIHI Certification Program is to improve existing conditions of natural resources affected by dams. The LIHI Certification Program will recognize facilities that are sited and operated in a manner that reduces environmental impacts, and will provide an incentive to other dam owners to change their operations to reduce environmental impacts. Certified facilities will at a minimum comply with applicable laws for protection of fish, wildlife, water quality, endangered species and

cultural and recreational resources. In addition, because these are environmental criteria, the level of environmental protection will generally exceed current legal requirements, which often take more than environmental concerns into account.

2. Create a credible and accepted standard for consumers to use in evaluating hydropower: A goal of the LIHI Certification Program is to create a credible and accepted standard for consumers to use in evaluating hydropower. The LIHI Certification Program will provide an independent and credible evaluation of hydropower to create a product that is effectively differentiated in the consumer marketplace for power. The LIHI Certification Program must be credible with consumers, the environmental community and the hydropower industry. To accomplish this, the LIHI Certification Program will be: (1) Based on objective certification criteria with a scientific basis; (2) Administered in a fair and efficient manner; and (3) Judged on applications that are open to public review and comment.

B. Program Objectives:

To meet the two Program goals described above, the Institute's objective is to require hydropower certified facilities to meet eight criteria related to: (1) River flows, (2) Water quality, (3) Fish passage and protection, (4) Watershed protection, (5) Threatened and endangered species protection, (6) Cultural resource protection, (7) Recreation, and (8) Facilities recommended for removal. The certification criteria have been designed with the recognition that if the level of environmental protection is set too high, an insufficient amount of power would be eligible for certification and thus the value of the program in the emerging power market would be undermined. If an effective market for low impact hydropower develops, the level of environmental protection in the criteria is intended to increase over time, consistent with the Institute's recognition of the need for a robust environmentally preferable power market.

III. BRIEF OVERVIEW OF CERTIFICATION PROCESS

The LIHI Certification Program is designed to be a fair and efficient process for determining whether a hydropower facility has low environmental impacts. An Applicant first reviews all LIHI application materials, and then fills out a certification questionnaire, attaches supporting information and forwards the completed application and a payment of \$750.00 to the Low Impact Hydropower Institute. LIHI's Executive Director will notify the Applicant of receipt of the application, and will forward the full application package to an Application Reviewer, who will perform an Intake Review of the submitted information. This Intake Review will assess whether information is missing from the application, and record initial substantive issues presented by the application. The completed Intake Review will be forwarded to the Executive Director, who in turn will provide it to the Applicant, along with a statement of the fee required to complete the full application review. Based on this information, an applicant can then decide whether to proceed with completion of the review process, or not go any further. If the applicant wishes to proceed, following payment of the remaining fee the application will be posted on LIHI's website and the public will be provided the opportunity to comment on it for 60 days. The Application Reviewer will then complete her/his review, which will include factual investigation needed to resolve factual disputes and evaluation of the veracity of claims made. The completed review

will be forwarded to the Executive Director and will include a certification recommendation. The complete review will be presented to LIHI's Governing Board, who will vote on whether to grant certification. The Board's decision will be posted on the Institute's Web page for 30 days. If no appeal is requested by either the Applicant, or by any member of the public who commented on the application package, the decision becomes final. Any appeals are referred to the Institute's Appeals Panel for review. Certification decisions from the Appeals Panel are referred to the Governing Board, which approves the Appeals Panel's certification decision.

A more detailed description of the certification process is contained in Part V of this Handbook.

IV. MARKETING

In order to protect the consumer and provide the greatest degree of credibility for the LIHI Certification Program, all marketing claims associated with Low Impact Hydropower Institute certification must meet the requirements established for the Certification Program. These requirements can be found in Part VI of this Handbook.

V. LIMITATIONS OF THE CERTIFICATION PROGRAM

The Low Impact Hydropower Institute's criteria ("LIHI Criteria") have been established as relatively simple objective criteria for distinguishing hydropower in the marketplace. These criteria should not, however, be considered a benchmark for exemplary environmental operations at hydropower facilities. While the LIHI Criteria are intended to be a national base for evaluating impacts of hydropower, not all environmental impacts associated with hydropower facilities are addressed by the criteria. In addition, while the reliance on resource agency recommendations is designed to create an objective system based on scientific evidence that takes into account site-specific conditions, any specific facility may have unique conditions that require more or less stringent conditions for environmental protection. Thus, supporters of the LIHI Criteria, officers and staff of the Low Impact Hydropower Institute and recipients of Low Impact Hydropower Institute certification reserve the right to seek conditions other than those outlined in the LIHI Criteria in any legal or administrative proceeding.

Support of the LIHI Certification Program or of the Low Impact Hydropower Institute's criteria also does not imply endorsement of any facility certified pursuant to the Certification Program or any resulting power product. Supporters of the LIHI Criteria, and officers and staff of the Low Impact Hydropower Institute, reserve the right to individually endorse or otherwise comment upon facilities receiving Low Impact Hydropower certification and resulting power products. In addition, support of the LIHI Certification Program or of the LIHI Criteria does not imply endorsement of any level of power consumption. Supporters of the LIHI Criteria, and officers and staff of the Low Impact Hydropower Institute, reserve the right to promote energy conservation as an alternative to power generation.

Certification by the Low Impact Hydropower Institute should not imply that a certified facility has no environmental impacts. Not all environmental impacts associated with hydropower facilities are addressed by the criteria. In addition, the certification of some facilities by the Low

Impact Hydropower Institute does not mean and should not imply that the Low Impact Hydropower Institute or its supporters, officers or staff are labeling other hydropower facilities as high impact.

The LIHI Certification Program is also intended only to aid in differentiating the environmental performance among hydropower facilities. The Institute certifies facilities with impacts that are low compared to other hydropower facilities based on objective scientific environmental criteria. As discussed above, this certification is being provided in order to allow well sited and well operated hydropower facilities to gain market advantage because of the benefits that hydropower provides compared to some other power sources. However, the certification does not compare hydropower generation impacts to the impacts of other forms of power production because the impacts of hydropower are not strictly comparable, in the Institute's view, to the impacts of other generation sources.

LOW IMPACT HYDROPOWER HANDBOOK

-- PART II --

APPLICABILITY OF LOW IMPACT HYDROPOWER CRITERIA

As presently formulated the Low Impact Hydropower Institute's Criteria ("LIHI Criteria") are not applicable to all types of hydropower. As a result, some facilities are not eligible for certification. The following describes which facilities are eligible for certification.

I. EXISTING AND NEW HYDROPOWER

The LIHI Criteria apply to:

(1) Existing hydropower facilities: any facility (dam and powerhouse) generating electricity as of August of 1998; and

(2) "New" hydropower facilities-- existing dams that added or increased power generation capacity after August of 1998: any dam existing in August of 1998 (whether or not used for generating electricity at that time) that added or increased power generation capacity that began generating or will begin generating electricity after August of 1998 (whether by addition of generating equipment, efficiency upgrades to existing equipment, or other means), provided the added or increased capacity:

(i) was created by modifications or additions to the existing facility (that is, modifications or additions to the existing dam, and/or if applicable, existing powerhouse) and did not require or include any new dam or other diversion structure; and

(ii) the added or increased capacity did not include or require a change in water flow through the facility that worsened conditions for fish, wildlife, or water quality (for example, operations did not change from run-of-river to peaking); and

(iii) the existing dam had not been recommended for removal or decommissioning by resource agencies, or recommended for removal or decommissioning by a broad representation of interested persons and organizations in the local and/or regional community prior to the added or increased capacity. Exceptions to this rule will be considered but only upon a showing that the added or increased capacity resulted in specific measures to improve fish, wildlife, or water quality protection at the existing dam.

"New" hydropower facilities that are not yet generating electricity at the time of application for certification are eligible for consideration, provided the FERC license or exemption, or similar authorization addressing environmental impacts has been issued, there are no pending appeals or litigation from that authorization, and the applicant specifically acknowledges that LIHI may suspend or revoke the certification should the

impacts of the project once operational cause non-compliance with the certification criteria. For such pre-operations certification, the certification term will begin when certification is completed, not when operations start. Applicants will also be charged a fee premium for pre-operations certification (see fee schedule in Part VII of this Handbook).

At a later date, the Governing Board may develop separate, more stringent, criteria to certify new hydropower dams.

II. INTERNATIONAL HYDROPOWER FACILITIES:

The LIHI Criteria do not apply to facilities located outside of the United States. At a later date, the Governing Board may revise the current criteria to apply to hydropower facilities outside of the United States that could sell their power within the United States.

III. PUMPED STORAGE FACILITIES:

The LIHI Criteria do not apply to pumped storage facilities.

LOW IMPACT HYDROPOWER HANDBOOK

-- PART III --

ORGANIZATIONAL STRUCTURE OF LIHI

I. INTRODUCTION

The Low Impact Hydropower Institute is an independent, non-profit corporation, and the administrator of the Low Impact Hydropower Certification Program (“LIHI Certification Program”). The Institute’s Governing Board oversees the certification process. A Hydropower Industry Advisory Panel provides input to the Governing Board on the impacts of the Certification Program on the hydropower and non-hydro renewables industry. An Appeals Panel will decide appeals of certification decisions. Members of the Governing Board and the Hydropower Industry Advisory Panel are listed in Appendix A of this Handbook.

II. ORGANIZATIONAL STRUCTURE

A. Low Impact Hydropower Institute:

The Low Impact Hydropower Institute is a not for profit corporation chartered to certify facilities meeting the Low Impact Hydropower criteria.

B. Governing Board:

The Low Impact Hydropower Institute’s Governing Board governs the LIHI Certification Program. Responsibilities of the Governing Board include:

- Appoint and supervise the Executive Director;
- Make all certification decisions;
- Decide policy issues as they arise in pre-application consultation or in individual certification decisions;
- Ensure the certification system meets its goals and objectives;
- Set application fees; and
- Periodically review and amend the LIHI Certification Program requirements as needed.

The Governing Board is comprised of from seven to 21 members. Membership requirements of the Governing Board are as follows. One half or more of the Governing Board members shall be from environmental organizations, and the remainder shall provide a balanced representation from organizations or industry such as: recreational boating, resource agencies, native American tribes, recreational fisheries, commercial fisheries, small consumer advocacy organizations, academic posts or others the Governing Board deems appropriate. Governing Board members will also maintain broad regional representation. Governing Board membership will be of individuals, but they will serve with their organizational affiliation. The Chairs of the Hydropower Industry Advisory Panel will participate in Governing Board meetings as non-voting

representatives.

All members of the Governing Board and Advisory Panel will serve in their personal capacity, but with institutional affiliation. Participation on the Board or Panels represents personal support of the goals and objectives of the Low Impact Hydropower Institute (although support of each provision in the criteria is not required). Endorsement of the goals and objectives of the Low Impact Hydropower Institute does not imply endorsement of facilities certified by the Low Impact Hydropower Institute or any resulting power product. Individual participation on a Board or Panel does not imply endorsement by the individual's employer of the goals and objectives of the Low Impact Hydropower Institute.

C. Executive Director:

LIHI's Executive Director oversees and administers the day-to-day activities of the Low Impact Hydropower Institute and the LIHI Certification Program. The Executive Director routinely engages contractor(s) to assist in this administration.

D. Hydropower Industry Advisory Panel:

The Hydropower Industry Advisory Panel will advise the Institute's Governing Board on industry concerns related to the LIHI Certification Program, including the criteria; implementation; certification process; technical issues related to hydropower projects, operations and management; and on other matters as requested by the Governing Board. Membership on the Hydropower Industry Advisory Panel shall be at the invitation of the Governing Board. Panel members shall either: (a) Own or lease a hydropower facility; or (b) Be engaged, directly or indirectly, in the manufacture of hydropower equipment; the development, financing, operation, maintenance or marketing of hydropower facilities; or in providing services to the hydropower industry. The Hydropower Industry Advisory Panel will be led by the Advisory Panel Chair, who will sit as a non-voting member of the Governing Board. Advisory Panel meetings will be open to any member of the hydropower industry.

E. Renewables Advisory Panel:

The Renewables Advisory Panel will advise the Institute's Governing Board on concerns related to the LIHI Certification Program's impact on non-hydro renewables, including the criteria, implementation, certification process, and on other matters as requested by the Governing Board. The Renewables Advisory Panel will be comprised of representatives from the non-hydro renewables industry and environmental organizations interested in promoting non-hydro renewables. Membership on the Renewables Advisory Panel shall be at the invitation of the Governing Board. The Renewables Advisory Panel will be led by a Renewables Advisory Panel Chair, who will sit as a non-voting member of the Governing Board. Advisory Panel meetings will be open to any member of the non-hydro renewables community.

F. Appeals Panel:

The Appeals Panel hears appeals, by either an Applicant or a member of the public, of certification decisions made by the Institute's Governing Board. The Appeals Panel functions independently of the Governing Board and make an independent decision about whether a facility should be certified. The Appeals Panel is comprised of three representatives selected by the Governing Board from a pool of qualified candidates. Appeals Panel members are selected based on their expertise with hydropower and natural resource issues and their ability to objectively evaluate cases concerning the LIHI Certification Program. Appeals Panel members are paid an hourly fee for their services.

G. Technical Assistance:

From time to time, the Institute's Governing Board and Executive Director may retain technical assistance in its ongoing evaluation of certain aspects of the LIHI Certification Program.

H. Application Reviewer:

Application Reviewers are individuals with experience on hydropower matters, and are hired by the Executive Director. The Application Reviewers reviews each certification application, make necessary inquiries, and make recommendations to the Executive Director and the Board of Governors. The Application Reviewers will also submit comments on appeals. The Application Reviewers generally are independent consultants working in a paid capacity reviewing certification applications. The Executive Director will oversee the work of the Application Reviewers.

Prior to reviewing an application, the Application Reviewer will review with the Executive Director any past contractual relationships with the Applicant and any other relationship with the Applicant that may affect the Application Reviewer's objectivity or create an appearance of impropriety. If an Application Reviewer has a current contractual relationship with the Applicant or knows any confidential information about the Applicant based on past contractual relationships, the Application Reviewer is barred from participating as an Application Reviewer on any application of that Applicant. If the Executive Director concludes that other current or past relationships between the Application Reviewer and Applicant may affect the Application Reviewer's objectivity or create an appearance of impropriety, the Executive Director will assign review of the application to another Application Reviewer.

I. Funding of Low Impact Hydropower Institute

The Low Impact Hydropower Institute is principally funded by application fees paid with each certification application and annual fees paid during the term of certification. From time to time LIHI also receives grants from government and charitable foundations. The amount of fees is periodically reviewed by the Governing Board.

LIHI's current fee schedule can be found in Part VII of this Handbook.

LOW IMPACT HYDROPOWER HANDBOOK

-- PART IV --

CERTIFICATION GOALS, STANDARDS, CRITERIA

The goals and standards of LIHI's eight criteria are described below. The specific language of the Low Impact Hydropower Institute's Criteria ("LIHI Criteria") is contained in LIHI's Questionnaire, located in Part VII of this Handbook.

The approach taken for setting the LIHI Criteria is designed to establish objective criteria while recognizing that conditions at every dam and on every river are different. The criteria rely on formal recommendations of expert government agencies whose mandates are to protect the resources the criteria are designed to evaluate. Thus, for most criteria the hydropower facility must meet the latest and most stringent recommendation of the relevant state or federal resource agencies. To accommodate situations where appropriate resource agency recommendations do not exist, the criteria establish other objective criteria to meet the same goals. If a facility meets the requirements under all eight of the criteria, the facility will be certified. A facility failing on one or more of the criteria will not be certified. The criteria do not apply to new hydropower dams (but additions to existing dams are eligible under certain circumstances), hydropower facilities outside of the United States, and pumped storage facilities.

1. Flows: The Flows Criterion is designed to ensure that the river has healthy flows for fish, wildlife and water quality, including seasonal flow fluctuations where appropriate. For instream flows, a certified facility must comply with recent resource agency recommendations for flows. If there were no qualifying resource agency recommendations, the applicant can meet one of two alternative standards: (1) meet the flow levels required using the Aquatic Base Flow methodology or the "good" habitat flow level under the Montana-Tennant methodology; or (2) present a letter from a resource agency prepared for the application confirming the flows at the facility are adequately protective of fish, wildlife, and water quality.

2. Water Quality: The Water Quality Criterion is designed to ensure that water quality in the river is protected. The Water Quality Criterion has two parts. First, an Applicant must demonstrate that the facility is in compliance with state water quality standards, either through producing a recent Clean Water Act Section 401 certification or providing other demonstration of compliance. Second, an applicant must demonstrate that the facility has not contributed to a state finding that the river has impaired water quality under Clean Water Act Section 303(d).

3. Fish Passage and Protection: The Fish Passage and Protection Criterion is designed to ensure that, where necessary, the facility provides effective fish passage for riverine, anadromous and catadromous fish, and protects fish from entrainment. For riverine, anadromous and catadromous fish, a certified facility must be in compliance with both recent mandatory prescriptions regarding fish passage and recent resource agency recommendations regarding fish protection. If anadromous or catadromous fish historically passed through the facility area but are no longer present, the facility will pass this criterion if the Applicant can show both that the

fish are not extirpated or extinct in the area due in part to the facility and that the facility has made a legally binding commitment to provide any future fish passage recommended by a resource agency. When no recent fish passage prescription exists for anadromous or catadromous fish, and the fish are still present in the area, the facility must demonstrate either that there was a recent decision that fish passage is not necessary for a valid environmental reason, that existing fish passage survival rates at the facility are greater than 95% over 80% of the run, or provide a letter prepared for the application from the U.S. Fish and Wildlife Service or the National Marine Fisheries Service confirming the existing passage is appropriately protective.

4. Watershed Protection: The Watershed Protection criterion is designed to ensure that sufficient action has been taken to protect, mitigate and enhance environmental conditions in the watershed. A certified facility must be in compliance with resource agency and Federal Energy Regulatory Commission (“FERC”) recommendations regarding watershed protection, mitigation or enhancement. In addition, the criterion rewards projects with an extra three years of certification that have a buffer zone extending 200 feet from the high water mark or an approved watershed enhancement fund that could achieve within the project’s watershed the ecological and recreational equivalent to the buffer zone and has the agreement of appropriate stakeholders and state and federal resource agencies. A Facility can pass this criterion, but not receive extra years of certification, if it is in compliance with both state and federal resource agencies recommendations in a license-approved shoreland management plan regarding protection, mitigation or enhancement of shorelands surrounding the project.

5. Threatened and Endangered Species Protection: The Threatened and Endangered Species Protection Criterion is designed to ensure that the facility does not negatively impact state or federal threatened or endangered species. For threatened and endangered species present in the facility area, the Applicant must either demonstrate that the facility does not negatively affect the species, or demonstrate compliance with the species recovery plan and receive long term authority for a “take” (damage) of the species under federal or state laws.

6. Cultural Resource Protection: The Cultural Resource Protection Criterion is designed to ensure that the facility does not inappropriately impact cultural resources. Cultural resources must be protected either through compliance with FERC license provisions, or through development of a plan approved by the relevant state or federal agency.

7. Recreation: The Recreation Criterion is designed to ensure that the facility provides access to the water without fee or charge, and accommodates recreational activities on the public’s river. A certified facility must be in compliance with terms of its FERC license or exemption related to recreational access, accommodation and facilities. If not FERC-regulated, a certified facility must be in compliance with similar requirements as recommended by resource agencies.

8. Facilities Recommended for Removal: The Facilities Recommended for Removal Criterion is designed to ensure that a facility is not certified if a natural resource agency concludes it should be removed. If a resource agency has recommended removal of a dam associated with the facility, the facility will not be certified.

LOW IMPACT HYDROPOWER HANDBOOK

-- PART V --

CERTIFICATION PROCEDURES, INCLUDING RE-CERTIFICATIONS

I. SUMMARY OF THE LOW IMPACT HYDROPOWER CERTIFICATION PROCEDURES

A. Introduction to the Certification Process:

The Low Impact Hydropower Institute's certification procedures ("LIHI Certification Procedures" for assessing an application for certification are designed to be a fair and efficient process for determining whether a hydropower facility has impacts that are low compared to other hydropower facilities based on objective environmental criteria. The Institute is committed to processing applications, especially those that are non-complex or controversial, in as prompt a fashion as possible.

Prior to submitting an application, a potential applicant should carefully read all of the materials contained in Part VII of this Handbook, and then may contact the Executive Director to discuss, in confidence, the nature of its application and any questions the applicant may have. As explained in the *Letter to Potential Applicants* contained in Part VII, the certification process will be initiated when the owner or operator of a hydropower facility submits an application package, consisting of a completed questionnaire and supporting materials, to the Institute, accompanied by the Intake Review fee, as set forth in the *Certification Program Fee Schedule* also contained in Part VII of this Handbook.

The remainder of this Part V contains a detailed description of various aspects of LIHI's certification procedures. For a brief overview of this process, please refer to Part I, section III of this Handbook.

B. Use and Terms of Certification:

Certification is designed to provide consumers with assurance that a facility has impacts that are low compared to other hydropower facilities based on objective environmental criteria. Certification entitles power from the facility to be marketed as certified by the Low Impact Hydropower Institute. All marketing claims referring to the certification by the Low Impact Hydropower Institute must meet the LIHI Certification Use Requirements contained in Part VI of this Handbook.

C. Public Availability of Certification Information:

An important component of the Institute's goals and objectives is to make certification decisions based on information that is open to public review and comment. Materials provided to LIHI on a confidential basis as part of a pre-application consultation with the Executive Director will be

kept confidential, unless and until a certification application is submitted. Any determinations made by the Governing Board on interpretations or other policy questions referred to the Governing Board by the Executive during pre-application consultation will be made public, although the name of the subject project and potential applicant will not. The Board, in its sole discretion, may seek public review and comment on such questions before deciding.

Except in rare circumstances, all information pertaining to a certification application provided to the Executive Director will be available for public review, either on the Institute's Web page or, for lengthy documents, for review upon request. The Executive Director has the discretion to keep information confidential, but this will only be done in rare and justified circumstances. Governing Board debate and voting on contested or otherwise controversial certification applications will be conducted at an open meeting (either in person or by phone). The Governing Board may meet in executive session when needed. The Executive Director will maintain a list of interested parties that will receive notice of all postings for public comment.

D. Compliance:

Certified facilities shall file an annual statement with the Executive Director confirming that in the preceding year, there has been no relevant change in conditions, violations of the LIHI Criteria or LIHI Certification Use Requirements, and no receipt of a relevant notice of violation from a government agency.

Certified facilities shall report to the Executive Director as soon as possible any relevant change in conditions, violations of the LIHI Criteria or LIHI Certification Use Requirements, or receipt of a relevant notice of violation from a government agency. Any other party may also notify the Executive Director of a violation or change in conditions. If the Governing Board finds that a certified facility has committed a significant violation of the Low Impact Hydropower criteria or Certification Use Requirements, or if the Governing Board finds that a material misrepresentation of fact was made in any submission from an Applicant, the Governing Board shall revoke the certification and/or take other actions to appropriately penalize the Applicant.

E. Term and Renewal of Certification:

Certification shall be valid for a period of five years, beginning from the date that the application was posted by LIHI for public comments. In the event that circumstances require that the application be posted for a second (or more) opportunity for public comments, the latest posting date constitutes the beginning of the certification date. To renew a certification, the holder of a Low Impact Hydropower certification shall submit a renewal application package to the Executive Director. An Intake Review will then commence. If the Intake Review finds that there have been no material changes at the facility that would affect the certification and if the criteria have not been revised, renewal will be granted. If there have been material changes or the criteria have been revised, the application will be subject to a full review in a process similar to an initial application.

F. Governing Board Review of Certification Program Requirements:

The Governing Board will annually review the Low Impact Hydropower Certification Program to determine whether it is meeting its goals and objectives. The Governing Board will develop, with input from the Hydropower Industry Advisory Panel, the Renewables Advisory Panel, and the general public, a long-term plan for the Certification Program. Through an annual review, the Governing Board will decide, with input from the Hydropower Industry Advisory Panel, and the general public whether to revise Certification Program requirements. Any revisions will be developed with a specific schedule for implementation.

II. CERTIFICATION PROCESS

A. Certification Review and Approval:

1. Pre-Application Consultation

After a potential applicant familiarizes itself with the Application Materials contained in Part VII of this Handbook, interested potential applicants may contact the Executive Director to discuss the certification process in advance of submission. This brief consultation is confidential, and will be without charge. The purpose of the pre-application consultation is to help the potential applicant understand the certification program and how it applies to the specific Facility, and to help the potential applicant provide the most complete and focused application possible.

The Executive Director cannot make any determinations as to certification results, either during the pre-application consultation or following completion of Intake Review. If warranted, the Executive Director can refer policy or interpretation questions raised by the pre-application consultation to the Governing Board for a decision. The Board may decline to address such questions prior to being presented with a complete review report from an Application Reviewer. Any Board decision on a policy or interpretation question raised by pre-application consultation will be made public, but the potential applicant and the specific project will not be identified. (Because such decisions would be made outside of an application for certification, the decision would not be subject to appeal unless an applicant formally applied for certification, and the Board utilized the policy interpretation in the certification decision. Then, per the current program requirements, any public commenter on the application could appeal the Board's decision, and the reasoning relied upon in making that decision. This does not preclude the Board from seeking public input and comment on any policy interpretations in advance of any specific application if it so desires, but this will be at the sole discretion of the Board.)

At the end of the pre-application consultation, the potential applicant can elect to submit a completed application in accordance with the following requirements, or may elect not to proceed.

2. Submission and Contents of Application Package: To initiate an application process, and particularly Intake Review, an Applicant must submit to the Executive Director a complete Application Package. For a single Facility, the Application Package will consist of:

- a) A completed Low Impact Hydropower Certification Questionnaire (see Part VII);

b) Supporting information for each of the relevant questions in the Low Impact Hydropower Institute’s Certification Questionnaire, detailed in Part VII, *Information Needed to Complete Certification Application*. In general, supporting information will consist of three elements for each question:

- (i) A brief narrative description of how the facility meets that particular requirement.
- (ii) Documentation of the relevant standard (usually an agency recommendation). The line-by-line instructions for each question provide direction and guidance on the information needed to document the relevant standard for that question.
- (iii) Where relevant, documentation that the facility is meeting that standard. The instructions for each question provide direction and guidance on the information needed to document compliance with the relevant standard for that question. Where appropriate, supporting documentation should include excerpts from the operating procedures manual for each project or operational records that demonstrate compliance. Some Federal Energy Regulatory Commission (“FERC”) project owners with newer licenses are required to provide annual compliance reports to FERC that will suffice for documentation (if the relevant standard is part of a FERC license). The Applicant will provide relevant excerpts from documents and be prepared to send whole documents on request; and

c) Additional information requested in the “Background Information” section of the Low Impact Hydropower Institute’s Certification Questionnaire, as described in detail in the line-by-line instructions contained in Part VII, *Information Needed to Complete Certification Application*. .

d) Optional information that the Applicant may wish to include, such as:

- (i) ISO 14000 certification or copy of Environmental Management System.
- (ii) Letters of support from resource agencies or other stakeholders.
- (iii) A copy of other environmental certifications pertinent to the facility.
- (iv) Information about any relevant resource management plans, habitat conservation plans, biological operating plans, memoranda of understanding or agreement. Whole documents are not intended here but may be requested by the Executive Director.

e) A sworn statement from an officer of the Applicant that the material presented in the application is true and complete. For applications for pre-operational certification of a “new” facility (see Part II, Section A.2), the Applicant must also acknowledge that the Institute may suspend or revoke the certification should the impacts of the project once operational cause non-compliance with the certification criteria.

f) A waiver of liability signed by an officer of the Applicant stating: “The primary goal of the Low Impact Hydropower Institute’s Certification Program is public benefit. The

Governing Board and its agents are not responsible for financial or other private consequences of its certification decisions. The undersigned Applicant agrees to hold the Low Impact Hydropower Institute, the Governing Board and its agents harmless for any decision rendered on this or other applications or on any other action pursuant to the Low Impact Hydropower Institute's Certification Program.”

g) The Intake Review fee. The amount for the Intake Review fee, as well the fee for the full certification review, is set forth in the fee schedule found in Part VII of this Handbook. Fees for the first year of operation will be based on the formula included in the fee schedule.

If an Applicant owns or operates multiple facilities in a watershed that are operationally or hydrologically connected, the Applicant may choose to submit a consolidated application for those facilities. For a consolidated application, the Application Package must include a completed Low Impact Hydropower Institute Certification Questionnaire and a consolidated application fee, as explained in Part VII, *Certification Program Fee Schedule*. However all other information described above can be submitted in a consolidated manner.

3. Intake Review: LIHI's Executive Director will notify the Applicant of receipt of the application, and will forward the full application package to an Application Reviewer, who will perform an Intake Review of the submitted information. This Intake Review will assess whether information is missing from the application, and record initial substantive issues presented by the application. The completed Intake Review will be forwarded to the Executive Director, who in turn will provide it to the Applicant, along with a statement of the fee required to complete the full application review.

4. Decision by Applicant on whether to Proceed to Full Review; Submittal of Any Missing Information and Fee for Completion of the Review: Following receipt of the Intake Review, if the applicant wishes to proceed with a full review of its application it will need to provide LIHI with all information determined in the Intake Review to be missing from the application, and pay the remaining fee to LIHI. These issues may be discussed with the Executive Director.

5. Posting Application Package: Following receipt of any missing information and payment of the remaining fee, the Executive Director will post all submitted application materials on the Institute's Web page,¹ and will notify all governmental and non-governmental contacts identified in the Application that the Application has been posted. The Executive Director will also maintain a list of relevant governmental and non-governmental contacts in differing regions and will send notification of the posting of the Application to this list.² Once posted on the Web, any individual or organization may within 60 days submit comments on the Application Package to the Executive Director. The Applicant may respond to these comments. All comments and

¹ An Applicant can petition the Executive Director to keep part of the application off of the Web posting if the Applicant believes the information is confidential. The Executive Director will grant requests to keep information confidential upon a strong showing of need for confidential status and only if the material is not a critical component of the Certification Application.

² This list will be generated from relevant government contact lists, conservation directories, and FERC mailing lists, and will be updated with names of any parties requesting general notification of applications.

responses will also be posted on the Institute's Web page.

6. Full Application Review: The Application Reviewer will examine the complete Application and any comments received on that package, and will make any necessary inquiries (e.g., to local resource agencies and NGOs) to resolve factual disputes, evaluate the veracity of claims, or make other inquiries as needed. The Application Reviewer will then submit a written report to the Executive Director recommending whether the facility should be certified as Low Impact Hydropower and outlining the basis for that decision. This review is expected to take approximately 60 days.

7. Preliminary Certification Decision: Based on the Application Reviewer's report, the Executive Director will make a certification recommendation to the Governing Board whether the Applicant's facility should be certified. If the Executive Director's recommendation is different than the Application Reviewer's, the recommendation will include an explanation for the change of recommendation. The Governing Board will issue a Preliminary Certification Decision. Otherwise, the Governing Board shall discuss and make a Preliminary Certification Decision at the next Governing Board meeting or via special telephone meeting. This process is expected to take approximately 30 days.

8. Notice of Preliminary Certification Decision: If the Preliminary Certification Decision is to certify the facility, that decision, along with the Application Reviewer's report and (if prepared) report of the Executive Director, will be posted on the Institute's Web page for 30 days. Notice of the posting will be provided to all individuals or organizations that commented on the initial Application Package ("Commenter"). If the Preliminary Certification Decision is to reject the certification application, the Executive Director will notify the Applicant in writing of the decision and reasons for rejection.

9. Certification Approval and Notice: If within 30 days of a Preliminary Certification Decision to certify no appeal is requested, the Executive Director will issue a Low Impact Hydropower Certification for the facility and post a notice of certification on the Institute's Web page. The Executive Director shall also send a notice of the certification both to all Commenters and to all stakeholders and government agencies identified by the Applicant or the Application Reviewer. This notice shall request that these parties notify the Executive Director if they become aware of any violation of the certification criteria or Certification Use Requirements.

B. Appeal (Optional):

1. Response to Notice (If the Preliminary Certification Decision is to Certify): If desired, any Commenter may submit within 30 days of the posting of the Preliminary Certification Decision on the Institute's Web page a letter to the Executive Director requesting an appeal. An appeal request must include specific reasons why the hydropower facility should have failed one or more criteria. If an individual or organization did not comment on the initial Application Package, they may not file an appeal.

2. Response to Notice (If the Preliminary Certification Decision is Not to Certify): If

desired, the Applicant may respond within 30 days to the notice of rejection either by: (a) mitigating the reasons for rejection and submitting a letter to the Executive Director explaining the changes the hydropower facility has made to come into compliance with the criteria; or (b) submitting a letter requesting an appeal and setting forth specific reasons why the hydropower facility should have passed the criteria.

3. Appeal: Applications will undergo an appeal in the event of an appeal request by either an Applicant or a Commenter. The Executive Director will constitute an Appeals Panel and forward the full certification application file to the Panel members. The Application Reviewer will review the appeal letter from the Applicant or Commenter and submit a written report to the Executive Director and the Appeals Panel that comments on the merits of the appeal. This process is expected to take 30 days.

4. Appeals Panel Review: When a certification application is referred to the Appeals Panel, the Appeals Panel shall review the Application Package and subsequent comments and reports, and make any needed inquiries. The Appeals Panel will hold a meeting to discuss and decide the appeal. Appeals Panel meetings can be in person or by phone. Decisions by the Appeals Panel will be made by majority vote. The Appeals Panel will function independently of the Governing Board and make an independent decision about whether a facility should be certified. Appeals Panel decisions will be rendered in writing to the Executive Director and the Governing Board and will include identification of both the issues of fact and the interpretations of the Low Impact Hydropower criteria and other policy matters that the Appeals Panel decided in order to render its decision. This process is expected to take 60 days.

5. Final Certification Decision: The Governing Board will review Appeals Panel decisions to ensure that the decision is consistent with the Governing Board's interpretation of the Low Impact Hydropower criteria and other policy matters. The Governing Board will give great deference to the Appeals Panel on factual matters. An Appeals Panel decision will be deemed approved by the Governing Board if the Governing Board takes no action within 30 days of notice of the Appeals Panel decision. The Governing Board will provide special review of appeals when: (a) They are flagged by the Appeals Panel or Executive Director for special Governing Board review; (b) The Applicant or a Commenter requests special review and the Governing Board decides that the special review request has merit; or (c) A member of the Governing Board so requests.

6. Notice of Certification Decision: If the Governing Board approves an Appeals Panel decision to certify a facility, either through a tolling of the 30-day deadline or after special review, the Executive Director will then issue a Low Impact Hydropower certification for the facility and post a notice of certification on the Institute's Web page. The Executive Director shall also send a notice of the certification both to all Commenters and to all stakeholders and government agencies identified by the Applicant or the Application Reviewer. This notice shall request that these parties notify the Executive Director if they become aware of any violation of the Low Impact Hydropower Criteria or Certification Use Requirements. For rejected applications, the Executive Director will notify the Applicant in writing of the decision and reasons for rejection.

C. Withdrawal of Application (Optional)

At any time within the application or appeal process, an Applicant may withdraw its application from consideration. If such a withdrawal occurs, the final status of the application in public Institute documents shall be described as withdrawn. This withdrawal shall be without prejudice. The Applicant may resubmit an Application Package at any time.

III. COMPLIANCE

A. Notification of Potential Non-Compliance:

A holder of a Low Impact Hydropower Institute certification must notify the Executive Director as soon as possible if at any time one or more of the following occurs: (1) a violation of the Low Impact Hydropower Institute's criteria; (2) a violation of the Certification Use Requirements; (3) a change in conditions relevant to the certification; or (4) the receipt of a notice of violation or non-compliance relevant to the facility's certification from any government agency. Any other party may also notify the Executive Director of the occurrence of one or more of these conditions. The notification may include an explanation as to why the violation or change in conditions does not amount to a significant violation warranting penalties.

B. Review of Potential Non-Compliance:

The Executive Director will review the alleged violation or change in conditions, make any necessary inquiries, decide whether to refer the allegations to an Application Reviewer and may, if necessary, request additional information from the certified facility. This request for additional information may include a facility inspection by the Executive Director and/or Application Reviewer. If an Application Reviewer is utilized, the Application Reviewer will submit a written report to the Executive Director regarding whether a compliance violation has occurred. Based on this report, the Executive Director will make a recommendation regarding compliance and penalties to the Governing Board. The Governing Board will determine what compliance action is appropriate. Standards for compliance and penalties for non-compliance are provided in Part VI of this Handbook.

C. Annual Statement:

A holder of a Low Impact Hydropower Institute certification must submit a statement to the Executive Director confirming that during the preceding year, there has been: (1) no violation of the Low Impact Hydropower Institute's criteria; (2) no violation of the Certification Use Requirements; (3) no change in conditions relevant to the certification; and (4) no receipt of notice of violation or non-compliance relevant to the facility's certification from any government agency. The statement must be submitted within 30 days of the anniversary date of the certification. Failure to file an annual statement, or a material misrepresentation contained in the statement may result in revocation of the certification.

IV. RENEWAL OF CERTIFICATION

A. Re-Certification Application:

At the end of the certification period, a holder of a Low Impact Hydropower Institute certification may apply for re-certification by completing and submitting a Re-Certification Application Package. This package will consist of:

1. A questionnaire to determine if any material changes have occurred in the Certification term that would affect the certification;
2. If there are material changes, completed information regarding the relevant questions on the original certification questionnaire and supporting documentation;
3. If there have been changes in the Low Impact Hydropower Institute's criteria, completed information regarding the new or revised questions on the original certification questionnaire and supporting documentation;
4. A sworn statement from an officer of the Applicant that the material presented in the Re-Certification Application Package is true and complete;
5. A waiver of liability signed by an officer of the Applicant stating: "The primary goal of the Low Impact Hydropower Institute's Certification Program is public benefit. The Governing Board and its agents are not responsible for financial or other private consequences of its certification decisions. The undersigned Applicant agrees to hold the Low Impact Hydropower Institute, the Governing Board and its agents harmless for any decision rendered on this or other applications or on any other action pursuant to the Low Impact Hydropower Institute's Certification Program." and
6. An application fee. The level of fee for application for re-certification is set forth in Part VII of this Handbook.

B. Re-Certification Review:

Review of applications from any certificate holder seeking renewed certification from LIHI will involve the following steps and approach:

1. Notification to Certificate Holder. Approximately six months prior to the expiration of the term (either five or eight years) of a previously-issued LIHI certification, LIHI will notify the certificate holder that its certification is due to expire, and will provide the holder the necessary instructions to apply to LIHI for re-certification, should the holder choose to do so. That information will include re-application materials and a statement of the application processing "base fee" due upon submittal of the new application for re-certification.³

³ LIHI's *Handbook*, Part VII, Certification Program Fee Schedule, states the following regarding the application fee for re-certification:

2. Posting for Public Comment. Upon receipt of an application for re-certification and the base fee, LIHI will post the application on its website and solicit public comment for a 60-day period.

3. Intake Review. A LIHI Application Reviewer will conduct an Intake Review of the application focused solely on determining the answers to the following two questions:

- *Has there been a material change in circumstances since the original certification was issued?* For purposes of recertification review, a “material change in circumstances” will mean one or both of the following:

- (a) Non-compliance: Since receiving its last certification from LIHI, the certificate holder/applicant has not implemented, or has delayed implementing, or has done an inadequate job of implementing obligations at or near the facility that are of relevance to LIHI’s criteria. These obligations could be in the form of terms and conditions of license(s), settlement agreements, resource agency recommendations or agreements, LIHI conditions of certification including annual notifications, agreements with local municipalities or other third parties or similar relevant obligations; or

- (b) New or renewed issues of concern that are relevant to LIHI’s criteria: Since receiving its last certification from LIHI, either new issues of concern and relevance to LIHI’s criteria have emerged that did not exist or were not made known to LIHI at the time of certification, or there continues to be ongoing problems with previously known issues that appeared to LIHI to be resolved or on the road to resolution at the time of certification but in fact are not resolved, and are ongoing at the time of the re-certification application. If a new license, settlement agreement, prescription, biological opinion or other similar regulatory decision has been made since the original recertification, these documents will be evaluated to determine if new or renewed issues have been raised.

- *Have any of LIHI’s criteria, or the Board’s interpretation of one or more criterion, changed in meaningful ways since original certification that are applicable to the circumstances of the facility seeking re-certification?*

4. Result from Intake Review.

- If the Application Reviewer can definitively determine from the submitted application materials, a review of the LIHI file containing the past certification decision(s), any public comments received during the application process, and any limited reviewer-initiated questioning

Each applicant for renewal will be charged a base fee amounting to 20% of the original Total Certification Fee + inflation. However, this base fee amount may be increased if re-certification review involves applying LIHI criteria that are new or have been amended since the original certification was issued, or if material changes have occurred at the Facility, in order to cover the costs of hiring an Application Reviewer.

by LIHI of the applicant and/or third parties, that the answer to both questions in paragraph 3. above is “no,” the Application Reviewer will recommend re-certification approval to LIHI’s Executive Director, and there will be no further application review.

- If the Application Reviewer is either
 - (a) unable to determine from the submitted application materials, a review of the LIHI file containing the past certification decision(s), any public comments received during the application process, and any limited reviewer-initiated inquiry to the applicant and/or third parties whether the answer to both questions above is “no” and believes that a more detailed and thorough investigation will be required to answer one or both questions, or
 - (b) has determined that the answer to one or both questions is “yes,”

then the application will require a full, complete review by the Application Reviewer should the applicant wish to continue the application process.

LIHI will notify the certificate holder of the results of the Intake Review. If a Full Review is required, and if the amount of the base fee already paid to LIHI is insufficient to cover the cost of this Full Review, LIHI also will notify the certificate holder of any additional fee that is owed to LIHI prior to commencing the full review.

5. Full Review. If a Full Review is triggered because:

- The Intake Review determined that the application did not contain adequate information to allow the Intake Reviewer to answer the two questions in paragraph 3. above, the Full Review will be completed and a recommendation for re-certification will ensue once the Application Reviewer is able to ascertain that the answer to both questions in paragraph 3. is “no,” This determination will be based on additional information submitted by the Applicant and, if needed, consultation with resource agencies and other third parties.

- The Intake Review determined that the answer to one or both questions in paragraph 3. above is “yes” and more extensive investigation by LIHI is required, at the conclusion of the full review the Application Reviewer will make a recommendation to the Executive Director as to whether LIHI’s criteria are still met by the facility, in light of the material change and/or the change in LIHI’s criteria or interpretation.

6. Decision making by LIHI. LIHI’s Executive Director will issue a new certification if the Executive Director determines from the review process (at either the intake or the full review stage) that all criteria have been satisfied. If the Executive Director concludes that a new certification should not be issued, the Executive Director will make that recommendation to LIHI’s Board of Directors, who will then make the determination of whether to re-certify the facility.

LOW IMPACT HYDROPOWER HANDBOOK

-- PART VI --

CONDITIONS FOR USE OF CERTIFICATION

I. TERM OF CERTIFICATION

The term of a Low Impact Hydropower Institute certification is five years, beginning from the date that the application was posted by LIHI for public comments. In the event that circumstances require that the application be posted for a second (or more) opportunity for public comments, the latest posting date constitutes the beginning of the certification date. The date of designation for pre-operations certification of a “new” facility (see Part II, Section A.2) is the date of certification, not the date operations begin.

II. IMPACT OF CERTIFICATION

Any hydropower facility certified through the process described in Part V above will receive Low Impact Hydropower Institute certification. Certification is intended to provide consumers with assurance that an independent panel has determined that a hydropower facility is well sited and well operated in accordance with eight objective and scientific environmental criteria. Facilities with the Low Impact Hydropower Institute certification may be advertised as holding such certification so long as the requirements in Section III below are met.

The Low Impact Hydropower Institute certification only certifies that the individual facility meets the Low Impact Hydropower Institute’s criteria. It does not certify or endorse an electricity product, nor does it indicate that members of the Low Impact Hydropower Institute’s Governing Board or supporters of the Low Impact Hydropower Institute’s Certification Program endorse the individual facility or any resulting power product. It also does not imply that the Low Impact Hydropower Institute or its supporters, officers or staff are labeling other hydropower facilities as high impact. The Low Impact Hydropower Institute certification may be used as a requirement by other programs endorsing or certifying power products in the market. The Low Impact Hydropower Institute encourages certified facilities to use these additional programs to obtain endorsement of power products.

III. CERTIFICATION USE REQUIREMENTS

A. Federal Trade Commission Principles:

Any use of a Low Impact Hydropower Institute certification must follow the principles established in regulations by the Federal Trade Commission, in its *Guides for the Use of Environmental Marketing Claims*, found at 16 C.F.R. Part 260. Applicants and certificate holders are encouraged to carefully review those regulations, and in particular the principles found at 16 C.F.R. §260.6.

B. Language for Describing a Low Impact Hydropower Institute Certified Facility:

The following is acceptable language for describing a Low Impact Hydropower Institute certified facility. This language must accompany all claims of Low Impact Hydropower Institute certification. This language must be clear and prominent and in close proximity to the claims of Low Impact Hydropower Institute certification. Any modifications to descriptions must be pre-approved by the Low Impact Hydropower Institute pursuant to Section E below.

This product includes Low Impact Hydropower from facilities certified by the Low Impact Hydropower Institute (an independent non-profit organization) to have environmental impacts in key areas below levels the Institute considers acceptable for hydropower facilities. For more information about the certification, please see www.lowimpacthydro.org.

C. Language for Referring to Supporters of the Low Impact Hydropower Institute Certification Program

As discussed above, an organization, company or individual may become a Low Impact Hydropower Institute Certification Program Supporter by endorsing the goals and objectives of the Low Impact Hydropower Institute Certification Program. Endorsement of the Certification Program's goals and objectives or any other support of the Low Impact Hydropower Institute does not imply endorsement of individual hydropower facilities meeting the criteria or any resulting power product, nor does endorsement imply the labeling of other hydropower facilities as high impact.

Any reference to individuals, companies or organizations that are Low Impact Hydropower Institute Certification Program Supporters or that otherwise support the Low Impact Hydropower Institute, must include the disclaimer provided below. This disclaimer must be clear and prominent and in close proximity to the reference to supporting individuals, companies or organizations.

The following organizations support the goals and objectives of the Low Impact Hydropower Institute Certification Program [or otherwise support the Low Impact Hydropower Institute (add if relevant)]. Certification of a facility by the Low Impact Hydropower Institute does not imply endorsement of that facility or any resulting power product by any of these organizations.

D. Language Use:

It is expected that language referring to Low Impact Hydropower Institute certification and Low Impact Hydropower Institute supporters will appear only in written materials related to the certified facility or to power generated from the facility. Any use of the certification other than that consistent with these Certification Use Requirements must be pre-approved by the Low Impact Hydropower Institute pursuant to Section E below.

E. Approval of Alternative Language and Claims:

The Low Impact Hydropower Institute must pre-approve the language regarding the Low Impact Hydropower Institute or Certification Program in any press release or product marketing materials that departs from the pre-approved language for describing the Low Impact Hydropower Certification Program or Supporters.

IV. COMPLIANCE OBLIGATIONS AND PENALTIES FOR NON-COMPLIANCE

Facilities certified by the Low Impact Hydropower Institute must maintain compliance with all Low Impact Hydropower criteria (see Part IV of this Handbook) and with the Certification Use Requirements (see Part VI Section III above). If the Governing Board finds that a certified facility has committed a significant violation of these requirements, or if the Governing Board finds that a material misrepresentation of fact was made in any submission from an Applicant, the Governing Board shall:

- A. Revoke the Low Impact Hydropower Institute certification;
- B. Bar the holder of the Low Impact Hydropower Institute certification from re-applying for five years;
- C. Require the holder of the Low Impact Hydropower Institute certification to notify immediately its current customers that its certification has been revoked, and, if its customer does not deliver power to the ultimate retail customer, to notify immediately the retail marketer; and/or
- D. Require any entity marketing power from the facility immediately to stop employing the Low Impact Hydropower Institute certification in its marketing unless it can find other supply that is certified by the Low Impact Hydropower Institute.

In unusual circumstances, the Governing Board has the authority to require additional penalties as it deems appropriate.

LIHI CERTIFICATION HANDBOOK

-- PART VII -- APPLICATION MATERIALS

- **LETTER TO POTENTIAL APPLICANTS**
- **INFORMATION NEEDED TO COMPLETE CERTIFICATION APPLICATION**
 - **CERTIFICATION QUESTIONNAIRE**
- **CERTIFICATION PROGRAM FEE SCHEDULE**

LIHI CERTIFICATION HANDBOOK

PART VII LETTER TO POTENTIAL APPLICANTS



Dear Applicant:

Thank you for your recent expression of interest in the Low Impact Hydropower Institute's (LIHI) certification program and the possibility of your hydropower facility being certified as low impact. This letter is intended to (1) provide you with an overview of the steps in the application and review/evaluation process that LIHI would be using to determine whether your hydropower facility meets LIHI's criteria for certification should you decide to apply, and (2) explain the application fee structure.

If you have filed an application with LIHI previously or are otherwise familiar with LIHI's application process, you will note from this letter that LIHI has instituted certain changes in both the application review process and the fee structure (as of May 15, 2011), and in certain instances also has clarified the information that must be filed with the application. These changes were instituted to better align LIHI's fees with the actual costs incurred by LIHI for processing and reviewing an application, and to improve the completeness of the information contained in the applications LIHI receives. LIHI believes that these changes will create a more time- and cost-efficient review process.

The initial steps in the application process are described briefly below. Do not hesitate to call me if further assistance is needed.

Step #1: Gathering Application Materials and Filling out the Questionnaire

Applications for certification must be assembled and presented by an applicant using LIHI's standardized application format. This format consists of LIHI's "Questionnaire," supplemented with certain information requested by LIHI in its accompanying "Line-By-Line Instructions." This Questionnaire and the "Line-By-Line Instructions" for filling it in and providing needed supplemental information are attached to this letter and can also be found at LIHI's website at:

<http://www.lowimpacthydro.org/existing-certification-application-program.html>

To ensure an expeditious processing of your application, it is very important for you to closely review the "Line-By-Line Instructions" and both fill in the Questionnaire accurately and completely and provide the additional supporting information as described in the "Line-By-Line

Instructions.” In the past, LIHI has received applications where some or all of this information was missing, requiring LIHI to track it down from the applicant or from third parties, often resulting in substantial delays and/or needless expenditures. Going forward, LIHI will stop processing applications that are not complete when filed and will require the applicant to supplement its application before processing continues.

Should you have questions about how to fill out the form, please email me with your question and either I, or an application reviewer, will get back to you.

Step #2: Filing Application with LIHI, Paying \$750.00, Conducting Intake Review

Following receipt of your application and payment of \$750.00 to LIHI, LIHI will conduct a mandatory *Intake Review* of the application. The non-refundable, flat fee of \$750.00 covers the cost of this Intake Review.

The Intake Review will be conducted primarily by one of LIHI’s application reviewers, who will determine whether information is missing or the application is otherwise not ready for a full review and evaluation. Also as part of this Intake Review, and based primarily on the material provided in the application, the application reviewer will assist me in:

- attempting to identify and alert you to issues that could make it impossible or very difficult for certification to be granted, as best as these issues can be identified at this preliminary stage of review and without making representations regarding success or failure of the application; and
- determining the total processing fee required for LIHI to complete the full Application Review, should you choose to go forward.

Please note that the Intake Review is a screening level review. Given that, the final full Application Review may result in additional informational needs being identified and/or previously unidentified issues being raised through the public comment process or the more thorough final review.

Step #3: Notification of Intake Review Results, Review Completion Payment, Commencement of Complete Review

Once I review the results of the Intake Review, I will discuss the findings with you, and you can decide whether you will go forward with LIHI’s complete review of the application. After the processing fee needed to complete the review has been paid to LIHI, the 60-day Public Comment period and the complete review will commence.

* * *

Thank you for your interest in LIHI, and I look forward to working with you in the future.

Sincerely,

Fred Ayer
Executive Director

encl: LIHI Certification Criteria

LIHI CERTIFICATION HANDBOOK

-- PART VII -- INFORMATION NEEDED TO COMPLETE CERTIFICATION APPLICATION

A. INTRODUCTION

The Low Impact Hydropower Institute (“Institute” or “LIHI”) has established the Low Impact Hydropower Institute Certification Program (“LIHI Certification Program”) to certify hydropower facilities that are well sited and well operated in accordance with objective and scientific environmental standards. The LIHI Certification Program’s goals are to reduce the environmental impacts of hydropower generation, and to create a credible and accepted standard for consumers to use in evaluating hydropower. The LIHI Certification Program’s objective to meet these goals is to establish certification criteria that hydropower facilities must meet in the following eight areas: (1) river flows, (2) water quality, (3) fish passage and protection, (4) watershed protection, (5) threatened and endangered species protection, (6) cultural resource protection, (7) recreation, and (8) facilities recommended for removal. A hydropower Facility meeting all eight certification criteria will be certified as a Low Impact Hydropower Facility, and will be able to use this certification when marketing power to consumers.

This document is comprised of:

- an explanation (Section B) of the certification application and review process;
- a questionnaire (Section E) that contains the criteria for determining whether a hydropower Facility can be certified;
- line-by-line instructions (Section D) explaining the questions found in the questionnaire, and specifying certain supplemental information required of the Applicant in the Application filed with LIHI.
- definitions (Section C) for certain language used in the questionnaire and the line-by-line instructions.

B. CERTIFICATION PROCESS

Certification under the LIHI Certification Program is designed to be a fair and efficient process. A complete description of the certification procedures is included in Part V of this Handbook. Briefly, an Applicant fills out a certification questionnaire, attaches supporting information and forwards the completed application to the Institute along with a check for \$750.00 to pay for the cost of Intake Review. The Institute’s Executive Director then forwards the Application to an Application Reviewer for Intake Review.

Following this Intake Review, the Applicant is advised by the Executive Director as to (1) the total processing fee required for LIHI to complete the full Application Review; (2) information that may be missing from the Application; and (3) issues that could make it impossible or very difficult for certification to be granted, as best as these issues can be identified at this preliminary stage of review and without making representations regarding success or failure.

If the Applicant chooses to correct any application deficiencies and initiate a full review, the Applicant will provide LIHI with the required fee to complete review of the application, the Institute will post the complete application on the Institute's Web page for a 60-day public comment period, and the Application Reviewer will review the Application. The Application Reviewer will consider any public comments received, conduct any factual investigation needed to resolve factual disputes, evaluate the veracity of claims, and report to the Executive Director with a certification recommendation.

The Institute's Governing Board makes a preliminary certification decision, which is posted on the Institute's Web page for 30 days. If no appeal is requested by either the Applicant or any member of the public who commented on the Application, the decision becomes final. Any appeals are referred to the Institute's Appeals Panel for review. Certification recommendations from the Appeals Panel are referred to the Governing Board, which makes the final certification decision.

C. DEFINITIONS

Defined terms are capitalized throughout and several are italicized when first used in the questionnaire.

1. **“Applicant”**: The party applying for Low Impact Hydropower Certification. This will usually be, but need not be, the Facility owner or operator.

2. **“Compliance”**: A Facility is in Compliance with a requirement or recommendation if it complies at the time the Applicant is filed and has not had any material violations or formal notices of violation issued by a state or federal agency within the prior year. If the Facility has been in violation of a requirement or recommendation but the Applicant does not believe the violation is material, the violation must be disclosed and its materiality explained in the application.

3. **“Cultural Resource”**: Material remains of past human life or activities that are of significant cultural or archaeological interest. Of cultural or archaeological interest means capable of providing scientific or humanistic understandings of past human behaviors, cultural adaptation, and related topics through the application of scientific or scholarly techniques such as controlled observation, contextual measurement controlled collection, analysis, interpretation and explanation. This term includes, but is not limited to, objects made or used by humans, such as pottery, basketry, bottles, weapons, weapon projectiles, tools, structures or portions of structures, pit houses, rock paintings, rock carvings, intaglios, or any portion or piece of the foregoing items,

and the physical site, location or context in which they are found, or human skeletal materials or graves.

4. “Facility”: A hydropower dam and associated project works, with one power generation source (*i.e.*, powerhouse). If a licensed hydropower project contains multiple dams and power sources, each power source shall be considered a separate Facility and shall complete this form separately. For instance, if a Federal Energy Regulatory Commission (“FERC”) license has four dams and four powerhouses, there are four Facilities. If the FERC license has two dams but only one powerhouse there is one Facility. If a single dam has multiple powerhouses, there is one Facility if the powerhouses are operated together as a unit. Resources jointly held by multiple Facilities may be allocated among Facilities within the same watershed, and consolidated applications may be submitted for multiple Facilities within a watershed; however, the owner/operator must document that the jointly held resources have not been allocated for the certification of another Facility.

5. “Mandatory Fish Passage Prescription”: Upstream and downstream fish passage requirements issued by Resource Agencies that must be included in a FERC license or exemption or otherwise must be complied with by the Facility owner/operator, usually pursuant to Section 18 of the Federal Power Act, or, if applicable, Section 4(e) of the Federal Power Act, Section 401 of the Clean Water Act, the Endangered Species Act, or other relevant state or federal provisions. For the purposes of these criteria, recommendations included in an Endangered Species Act Biological Opinion or Recovery Plan are considered Mandatory Fish Passage Prescriptions. If a single Resource Agency has made differing prescriptions, the most recent prescription shall apply. If different Resource Agencies have made differing prescriptions, the most environmentally stringent prescription shall apply. For example, if the National Marine Fisheries Service issues a prescription requiring fish ladders with 99% fish passage survival, the U.S. Fish and Wildlife Service issues a fish ladder prescription with 90% survival, and then the National Marine Fisheries Service revises its prescription to require 94% survival, to qualify as Low Impact Hydropower, the fish ladder at the Facility must have 94% survival.

6. “Native American Tribe”: Federally recognized Native American tribes which are affected by the Facility and have governing authority over natural resources reserved by or protected in treaties, executive orders or federal statutes.

7. “Resource Agency”: A state, federal or tribal agency whose mission includes protecting fish and wildlife, water quality and/or administering reservations held in the public trust. This includes the U.S. Fish and Wildlife Service, the National Park Service, the U.S. Bureau of Indian Affairs, the U.S. Bureau of Land Management, the National Marine Fisheries Service, the U.S. Forest Service, the U.S. Environmental Protection Agency, the Northwest Power Planning Council, Native American Tribes, the state department of environmental protection, the state departments of natural resources and fish and game, and any other similar agency. “Resource Agency” does not include the Federal Energy Regulatory Commission, nor does it include the Tennessee Valley Authority, the Bonneville Power Administration, the U.S. Army Corps of Engineers, or the Bureau of Reclamation in their capacity as owner or operator of a Facility.

8. “Resource Agency Recommendations”: Recommendations or conditions for operation, maintenance, and construction of structures of the Facility submitted by Resource Agencies for the Facility. Resource Agency Recommendations considered in Low Impact Hydropower certifications shall be:

- a) *Issued pursuant to a proceeding.* Valid Resource Agency Recommendations are those issued pursuant to a legal or administrative proceeding or other legally enforceable agreements between a Resource Agency and the dam owner/operator. The proceeding anticipated to apply for most privately owned Facilities is a FERC licensing or exemption proceeding. For a FERC-regulated Facility, these recommendations would include proposed or mandated license conditions submitted through the FERC licensing or other processes pursuant to Federal Power Act Sections 4(e), 18, 10(a) or 10(j), Clean Water Act Section 401, the Endangered Species Act or other state or federal provisions. For non FERC-regulated Facilities, the proceedings anticipated to apply include consultation pursuant to the Endangered Species Act, federal or state Clean Water Act proceedings, Northwest Power Act proceedings and other proceedings resulting in a legally enforceable agreement between the Facility owner/operator and a Resource Agency. Resource Agency Recommendations that are subsequently overturned by a legal proceeding cease to be valid for the purposes of certification.
- b) *Recent.* If a single Resource Agency has made multiple recommendations, the most recent recommendation shall apply. This principal also applies when there is a settlement. If a Resource Agency is party to a settlement, or otherwise formally concurs in a settlement, the settlement terms are considered to be the most recent Resource Agency Recommendation for these purposes. If, however, a Resource Agency is not party to a settlement and does not formally concur in the settlement, the most recent recommendation of that Resource Agency, and not the settlement terms, apply for purposes of certification.
- c) *Environmentally Stringent.* The most environmentally stringent recent Resource Agency Recommendation shall apply where different Resource Agencies have made differing recommendations. If a condition in the Facility’s FERC license or exemption (or other operating requirement, if not FERC licensed) is less environmentally stringent than a Resource Agency Recommendation, the Facility must meet the Resource Agency Recommendation to be certified as Low Impact Hydropower. For example, if the U.S. Fish and Wildlife Service originally recommended a 100 cfs minimum flow, and the State Department of Fish and Game recommended 50 cfs, then the U.S. Fish and Wildlife Service revised its recommendation to 80 cfs, and FERC issued a license with a 40 cfs minimum flow, to qualify as Low Impact Hydropower the Facility must release 80 cfs.
- d) *Resolution of Conflicting Resource Agency Recommendations.* Where there are conflicting Resource Agency Recommendations and the conflict is not resolved by applying the most Recent and most Environmentally Stringent Recommendations, the conflict shall be resolved by applying the Recommendations based upon the health of threatened or endangered biological organisms first, the health of other biological organisms second, Cultural Resources third and recreation fourth, unless there is a statutory mandate to resolve the

conflict otherwise. For example, Recommendations designed to protect threatened or endangered species (a Biological Opinion, for instance) would prevail over recommendations regarding recreation. If a conflict still exists among Resource Agency Recommendations, the Governing Board will make a determination which Recommendation shall apply. For guidance regarding conflicts among Resource Agency Recommendations, consult the Executive Director.

9. “Riverine Fish”: A fish that spends its entire life cycle in the river, and does not migrate to/from the ocean or a lake. Riverine Fish are often called resident fish.

10. “Take”: For purposes of impacts to threatened or endangered species, Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct.

D. LINE-BY-LINE INSTRUCTIONS

1. General Instructions:

These instructions provide guidance on answering questions in the Low Impact Hydropower questionnaire (Section E). Remaining requirements for completing a certification application can be found in Part V of this Handbook

The questionnaire is broken into nine sections: a background information section and one section each for the eight criteria (flows, water quality, fish passage and protection, watershed protection, threatened and endangered species protection, Cultural Resource protection, recreation, and Facilities recommended for removal). To be certified as Low Impact Hydropower, a Facility must pass each of the eight criteria.

All of the questions on the questionnaire (other than the background information questions) are designed to be answered by Yes, No or N/A (not applicable). If the Applicant is seeking certification of a “new” Facility, that is, an existing dam that added or increased power generation capacity after August of 1998, then there are several additional background questions (questions 13-17) that must be answered to determine whether the “new” Facility is eligible for certification.

After the background section, the questionnaire has two columns on the right of each question that allow an Applicant to select Yes, No or N/A as a response. Responses entered in the middle column will either pass that criterion or allow the Applicant to proceed to the next question within that criterion. This column contains instructions as to whether the Facility has passed that criterion or whether another question must be answered within the criterion. In order to ensure that the right questions are answered, please answer the questions in order within each criterion.

One of the most potentially confusing aspects of the questionnaire is determining which Resource Agency Recommendations are relevant for answering several of the questions. Please see the definitions of Compliance and Resource Agency Recommendation for guidance in answering any question referring to a Resource Agency Recommendation, as well as the line-by-

line instructions. To answer the question, review any recommendations made by a Resource Agency in an administrative or judicial proceeding, and determine which recommendation should be applied using the conditions set in the question and the conditions and priorities set in the definition of Resource Agency Recommendation. If a condition in a Facility's FERC license or exemption is less Environmentally Stringent than a Resource Agency Recommendation, the Facility must comply with the Resource Agency Recommendation to qualify as Low Impact Hydropower. Settlements in FERC or other proceedings, where a Resource Agency is party to, or concurs in, the settlement, have the effect of becoming the latest Resource Agency Recommendation for that Resource Agency on the topics covered by the settlement.

In order to document compliance with several of the criteria (questions A.1, A.2, B.1.a, B.1.b (Option 1), C.1, C.2.b, C.3.c, C.4.a, C.5, C.6, E.2, E.3, E.5, F.1, F.2, G.1, and G.2), the Applicant is required to seek and, absent some showing that it is impossible, obtain and provide to LIHI a letter from the Resource Agency official authorized to make recommendations for the Resource Agency in other comparable circumstances, such as in FERC proceedings. If required letters are not provided in the application that is filed with LIHI, such absence will be noted in the Intake Review process and will likely result in significant delay and an increase in process costs. Conversely, providing a letter from the Resource Agency where required by a particular criterion will help expedite the application review process and will ensure that all relevant Resource Agency officials are notified of the impending application. As part of the Application Review, the Application Reviewer will be contacting the relevant Resource Agency officials to confirm that: (1) the Resource Agency Recommendations identified by the Applicant are still valid and are the most recent Recommendations from the Resource Agency and (2) the Applicant is in compliance with the Recommendations. A letter from the Resource Agency submitted by the Applicant as part of the Application will make this review process simpler and faster. If the Applicant is not able to obtain such a letter, this does not create a bar to submitting an application to the Institute. Rather, if the Applicant is unable to obtain such a letter, the Applicant should submit the Application, include an explanation of why no letter was obtained, and provide any information acquired in oral conversations with the Resource Agency. If the letter will take a while to obtain from the Resource Agency, the Applicant may submit its Application, include an explanation of correspondence with the Resource Agency regarding the letter, and forward the letter to LIHI's Executive Director when it is received.

For three criteria (Questions A.3, B.1.b (Option 2), and C.4.b), a letter from a Resource Agency may be allowed to stand in place of a recent Resource Agency Recommendation and/or serve as the standard with which the Applicant must comply. If the Applicant seeks to meet the terms of criteria A, B.1, and C.4 through these provisions, the Applicant must obtain the letter to comply; an explanation of why the Applicant was unable to obtain the letter will not be sufficient.

If a dam owner/operator owns or operates multiple Facilities in a watershed that are operationally or hydrologically connected, the owner/operator may choose to submit a consolidated application for those Facilities. Each Facility must independently qualify under all criteria, and a separate certification questionnaire must be filed for each; however, supporting information and materials may be submitted jointly. The total watershed protection requirement for the multiple Facilities may be submitted as a package, and need not be expressly allocated to specific Facilities as long

as the total Watershed Protection required for each Facility is met.

The date of December 31, 1986 is used throughout the criteria because the Electric Consumers Protection Act, with its explicit requirement for balancing power and non-power values in FERC licensing proceedings, became effective after that date.

Applicants are encouraged to consult with the Executive Director if they have any questions in preparing an application.

2. LINE-BY-LINE INSTRUCTIONS:

Background Information:

Questions 1, 4 & 5 – These questions are self-explanatory.

Question 2 - Contact information should be for the person affiliated with the Applicant who will be able to answer questions and provide information regarding the operations of the facility and existing regulatory requirements, or for the person who will be responsible for gathering this information from others and transmitting it to LIHI if requested. Information should include an email address.

Question 3 - Please provide the following information regarding the location of the facility:

- (a) the state in which Facility is located;
- (b) the river on which Facility is located;
- (c) the river-mile location of the Facility dam (the distance in miles from the dam to the river, ocean, or lake to which the Facility river is a tributary);
- (d) the river's drainage area in square miles at the Facility's intake;
- (e) a written description of the location of other dams on the same river upstream and downstream of the Facility; and
- (f) the exact latitude and longitude of the Facility dam.

In addition, the application must include at least one map (can be a sketch map) showing the location of the Facility dam as well as the location of other upstream and downstream dams on the river if those dams may affect fish movement or river flows in the project area. It would also be very helpful for the map(s) to show the location of major upstream and downstream tributaries of the river on which the Facility dam is located, as well as the major rivers or other water bodies into which the subject river flows. A map(s) containing this information that was provided in a regulatory proceeding is acceptable. Locations illustrated on the map(s) provided can be approximated. For FERC regulated dams, provide the FERC project number for each dam. All maps provided should be in a JPEG format, or another format that can easily be "cut and pasted" into a LIHI-created report.

Question 6 – Please describe the Facility's regulatory status. For FERC-regulated Facilities please enter the FERC license or exemption number, dates of licensing and next relicensing, and status of any relicensing or post-licensing proceedings, including any compliance issues the Facility has faced. For federal Facilities please provide a citation to the authorizing law and

describe any recent or ongoing legal or regulatory proceedings that affect operations at the Facility. Include copies of the FERC license/exemption and any relevant amendments with the Application.

Question 7 – This question is self-explanatory.

Question 8 – Please provide the acreage (or square feet) of the footprint of the non-reservoir buildings and other equipment associated with the Facility, such as the dam, penstocks, and power house.

Question 9 – Please provide the area inundated by any reservoir associated with the Facility, measured using the normal maximum operating level. Inundated land does not include the area of the natural river or stream bed inundated by the reservoir or the area of any natural lakes expanded through artificial means (the area of the river bed or lake may be subtracted from the total area covered by the reservoir). If exact measurements of the natural riverbed or lake are not available, please provide an approximation and explain your estimate. Response to this question is requested but not required.

Question 10 – Please provide the area of the perimeter of the reservoir extending from the average annual high water line to a distance of 200 feet perpendicular to the perimeter of the reservoir.

Question 11 – Please attach a list of contacts in the relevant Resource Agencies and in non-governmental organizations that have been involved in proceedings involving the operations of the Facility either during the licensing proceeding or thereafter (*e.g.*, recommending operating conditions for your Facility, intervenors in relicensing, plaintiffs in lawsuits, participants in stakeholder proceedings or in post-licensing discussions. The Resource Agency contacts should be the persons or offices that would be most knowledgeable about the recommendations made regarding the Facility and that have greatest knowledge about its current operations. Care should be taken to insure that the list is up to date. At a minimum, it should include telephone numbers and email addresses and identify the organization and any department, division, and section names.

In addition to a listing of the contacts, with each listing please state the last time you had discussions, if any, with the contact, the general nature of the discussion, and your assessment of the ongoing working relationship with the contact.

Question 12 – Please provide a brief description of the Facility and its mode of operation (*i.e.*, peaking, run-of-river). The Low Impact Hydropower Institute will use this information to gain a general understanding of the Facility, so please include any information you believe would be useful in explaining your Facility to a person knowledgeable about hydropower operations. Please provide photographs of the Facility (dam and associated project works) and a plan showing the layout of the Facility, as well as any available maps and /or diagrams that illustrate the Facility and its location in the river system and relative to other facilities consistent with Question 3 above.

Questions Regarding “New” Facilities:

Questions 13-17 – These questions are only to be answered if the Facility in question is a “new” Facility, that is, an existing dam that added or increased power generation capacity after August of 1998. If the Facility in question (including the dam portion of the Facility) was completed and producing electricity before August of 1998 with no subsequent increase in capacity, the Applicant can skip questions 13-17 and proceed to section A.

Question 13 – Please identify the date that the dam portion of the Facility was completed. If the dam was not completed as of August 1, 1998, the Facility is not currently eligible for the certification program.

Question 14 – Please identify the date that the added or increased generation capacity first came online, that is, the date that the added or increased generation was first producing electricity.

Question 15 – Please describe whether the added or increased capacity at the existing dam required the construction of any additional dam or water diversion structure, including the installation of flashboards or raising the flashboard height. If it did, the Facility is not currently eligible for the certification program.

Question 16 -- Please describe whether the addition of, or increase in, generation capacity included or required a change in the water flow through the Facility that worsened conditions for fish, wildlife, or water quality. For example, if the addition of power generation to the existing dam requires a change in operations from run of river to a peaking operation, this would be a change in the water flow through the project that worsened conditions for fish, wildlife, or water quality, and the Facility would not be eligible for certification. Supporting documentation should include a brief narrative comparison of the conditions for fish, wildlife, and water quality before, and after the added or increased capacity. In addition, inclusion in the application of a letter from a relevant Resource Agency confirming that the addition of, or increase in, generation capacity did not include or require a change in the water flow through the Facility that worsened conditions for fish, wildlife, or water quality is encouraged.

Question 17 – For question 17(a), please indicate whether the existing dam of the Facility was recommended for removal or decommissioning by Resource Agencies, or recommended for removal or decommissioning by a broad representation of interested persons and organizations in the local and/or regional community prior to the added or increased capacity.

If you answered “yes” to question 17(a), the Facility is not eligible for certification, unless you can show (under 17(b)) that the added or increased capacity resulted in specific measures to improve fish, wildlife, or water quality protection at the existing dam. If such measures were a result, please describe the measures and how they improved fish, wildlife, or water quality protection at the Facility. Letters from the relevant Resource Agencies confirming the improvements are encouraged.

Question 18 – This question is for any “new” Facility that is not yet operational at the time of application for certification. The Institute will consider such applications, but only if the “new” Facility has at least been through the requisite regulatory process and received authorization (question 18(a)). In most cases, this will mean that the facility including the new generation will have been authorized via a FERC license or exemption. In addition, the authorization has to be final with no pending appeals (such as rehearing requests) or litigation (question 18(b)). If a facility has not received authorization yet, or it has received authorization but that authorization is under appeal or in litigation, LIHI will not consider it for certification. The applicant may re-apply at a later time.

A. Flows

The Flows Criterion is designed to ensure that the river has healthy flows for fish, wildlife and water quality, including, where appropriate, seasonal flow fluctuations characteristic of a natural system. For instream flows, a certified Facility must comply with recent Resource Agency Recommendations for flows, or meet one of two alternative standards to demonstrate that flows are appropriately protective of water quality, fish and wildlife.

Question A.1. – If the Facility is in Compliance with the relevant Resource Agency Recommendation pursuant to the conditions in the Resource Agency Recommendation definition, the Facility will pass the Flows criterion. If there is a relevant Resource Agency Recommendation and the Facility is not in Compliance, the Facility will fail the criterion. The Resource Agency Recommendations on flows must be for fish, wildlife and water quality protection, mitigation and enhancement. If such a recommendation is for purely recreational purposes, it does not apply here (though it may apply in Criterion G below). Please provide information demonstrating that the Facility is subject to a relevant Resource Agency Recommendation and is in Compliance with the Recommendation. Recommendation and Compliance information can include, *e.g.*, copies of a FERC-filed Resource Agency Recommendation, mandatory condition, or provision(s) of a Settlement Agreement addressing flows, combined with a demonstration that (1) the recommendation or Settlement provision was adopted in a FERC license, and (2) that the Facility has operated in compliance with the license, and that any deviations from flow conditions have not been considered as license violations by FERC. The Applicant should seek to obtain a letter from the Resource Agency official authorized to make recommendations for the Resource Agency in other comparable circumstances, such as in FERC proceedings. The letter should confirm that: (1) the Resource Agency Recommendation is still valid and is the most recent Recommendation from the Resource Agency; and (2) the Facility is in Compliance with that Recommendation. Please see the general instructions above for more guidance regarding this letter.

If there has been no relevant Resource Agency Recommendation since December 31, 1986, the appropriate response is “N/A” and the question A.2 should be answered.

Question A.2. – In Question A.2., the Applicant may show that the Facility is operated with a flow release schedule that meets the specified standards (Aquatic Base Flow or “good” habitat flow standards using the Montana-Tennant method). References and methodologies for these

specified methods are available from the Institute. Please provide documentation of the calculation used to determine the required flow and evidence of Compliance with those flows. The Applicant should seek to obtain a letter from the Resource agency official authorized to make recommendation for the Resource Agency in other comparable circumstances, such as in FERC proceedings. The letter should confirm that the Facility is in Compliance with the flow standard. Please see the general instructions above for more guidance regarding this letter.

Question A.3. – If the Facility cannot meet the standards in A.2., the Applicant may seek to demonstrate that the flows at the Facility are adequately protective of fish, wildlife and water quality. This demonstration must be confirmed through a letter from the Resource Agency official authorized to make Recommendations for the Agency in other comparable circumstances, such as in FERC proceedings. Because this letter is being used as a substitute for an Agency having the opportunity to make a formal Resource Agency Recommendation, the letter must be prepared for the purpose of this application; a general letter will not be sufficient, nor will an explanation of why the Applicant was unable to obtain a letter suffice. The letter must state that the flow schedule at the Facility is adequately protective for fish, wildlife and water quality, and confirm that the Facility is in Compliance with the flow schedule. The letter should also, if possible, refer to the Resource Agency’s substantive flow standards for protection of fish, wildlife and water quality. A letter stating only that a flow standard has not been legally required or that the flow conditions meet the legal requirement is not sufficient. Documentation should include the letter and evidence of Compliance with the flow conditions specified in the letter.

B. Water Quality:

The Water Quality Criterion is designed to ensure that water quality in the river is protected. The water quality criterion has two parts. First, a Facility must demonstrate that it is in Compliance with state water quality standards, either through producing a recent Clean Water Act Section 401 certification or providing other demonstration of Compliance. Second, a Facility must demonstrate that it has not contributed to a state finding that the river has impaired water quality under Clean Water Act Section 303(d).

Question B.1. – Question B.1 requires a demonstration of Compliance with water quality standards. For Low Impact Certification, a “Yes” answer is required for *either* Question B.1.a or B.1.b.

Question B.1.a. – Compliance with a water quality certification issued under Clean Water Act Section 401 after December 31, 1986 is required under Question B.1.a. A waiver of certification authority by the state does not qualify as water quality certification. If the water quality certification has been waived, the Facility must instead meet this part of the water quality criterion through documentation as specified below under Question B.1.b. The Applicant should provide a copy of the water quality certification and seek to obtain a letter from the Resource Agency official authorized to make recommendations for the Resource Agency in other comparable circumstances, such as in FERC

proceedings. The letter should confirm that: (1) the water quality certification is still valid and is the most recent water quality certification from the Resource Agency; and (2) the Facility is in Compliance with all conditions issued pursuant to that water quality certification. Please see the general instructions above for more guidance regarding this letter.

Question B.1.b. – For Question B.1.b., the first option is for the Facility to demonstrate actual Compliance with the quantitative standards established by the state to support the designated uses for that body of water. In the application, there must be: (1) information demonstrating Compliance, which should include information on the characteristics of the river on which the facility is located (e.g., permitted wasteloads, hydrology), the Facility’s operating parameters that are relevant to potential impacts to water quality (e.g., spillage, hydraulic operating range), and water quality monitoring data that accurately reflects current conditions, *and* (2) a letter from an appropriate state water quality official stating that the Facility is in Compliance. Please see the general instructions above for more guidance regarding this letter.

Please also provide either a copy of the actual applicable quantitative water quality standards, or a link to this information on the state agency’s website.

The second option applies when the Facility does not possess data demonstrating current Compliance with the state’s quantitative water quality standards and written correspondence from an appropriate state water quality official agreeing that the Facility is in Compliance. In these cases, the application must contain:

(1) a letter from an appropriate state water quality official stating that there is reasonable assurance that the waters in the Facility area and in the downstream reach are in compliance with the state’s quantitative water quality standards based on available data, river characteristics, permitted wasteloads, project operating constraints (e.g., spillage, hydraulic operating range) and other relevant data, *and*

(2) if the official further believes that additional data should be gathered to confirm the official’s conclusion of reasonable assurance of compliance, then the application must include a sampling and analysis plan for the next field season sufficient to allow the official to make a final determination that the Facility is in Compliance, and a statement from the state agency official confirming the acceptability of the sampling plan.

Please see the general instructions above for more guidance regarding this letter.

Question B.2. – Question B.2 provides for a disclosure of whether the relevant stretch of river and any Facility-associated lake or reservoir have not been identified by the state pursuant to Clean Water Act Section 303(d) as having impaired water quality. Please provide documentation from the applicable state water quality agency showing whether or not the waters of the Facility area and downstream reach are designated as impaired in the most recent listing of water bodies designated under Section 303(d). If there is a draft 303(d) list that is out for public review or filed

for EPA approval, please provide information on the proposed status of the waters. Links to the applicable state Web pages should be provided.

Question B.3. – If the relevant stretch of river has been designated as having impaired water quality under Section 303(d), the Facility may still pass the water quality criterion if the Institute determines that the Facility does not cause, or contribute to, the water quality problem. This determination may be based on the state’s identification of causes of the violation that are unrelated to the Facility and its operations; a letter from the state explaining that the Facility and its operations neither cause nor contribute to the violation; or a letter from the Facility owner/operator that explains obvious exclusions from causation (*e.g.*, violations due to toxic chemicals from an upstream plant unrelated to the Facility).

C. Fish Passage and Protection:

The Fish Passage and Protection Criterion is designed to ensure that, where necessary, the Facility provides effective fish passage for Riverine, anadromous and catadromous fish, and protects fish from entrainment. For Riverine, anadromous and catadromous fish, a Facility must be in Compliance with both Recent Mandatory Fish Passage Prescriptions and Recent Resource Agency Recommendations regarding fish protection.

If anadromous or catadromous fish historically passed through the Facility area but are no longer present, the Facility will pass this criterion if the Applicant can show both that the fish are not extirpated or extinct in the area due in part to the Facility and that the Facility has made a legally binding commitment to provide any future fish passage Recommended by a Resource Agency.

When no recent Mandatory Fish Passage Prescription exists for anadromous and catadromous fish and the fish are still present, the Facility must demonstrate either that there was a recent decision that fish passage is not necessary for a valid reason, that existing fish passage survival rates at the Facility are greater than 95% over 80% of the run, or obtain a letter from the relevant Resource Agency supporting the existing fish passage.

Question C.1. – The least complex method of satisfying the fish passage requirements is Compliance with upstream and downstream Mandatory Fish Passage Prescriptions issued after December 31, 1986. If a Mandatory Fish Passage Prescription has been issued for the Facility since December 31, 1986, please provide it and evidence of Compliance. Applicants should note that a Resource Agency reservation of authority to prescribe fish passage at a future date under the authority of a FERC license or exemption does not constitute a Mandatory Fish Passage Prescription.

In those instances in which a Mandatory Fish Passage Prescription has been issued after December 31, 1986, the Applicant should seek to obtain a letter from the Resource Agency official authorized to make recommendations for the Resource Agency in other comparable circumstances, such as in FERC proceedings. The letter should confirm that: (1) the Mandatory Fish Passage Prescription is still valid and is the most Recent Prescription from the Resource Agency; and (2) the Facility is in Compliance with the Prescription. Please see the general

instructions above for more guidance regarding this letter.

If a Mandatory Fish Passage Prescription has not been issued, or was issued on or before December 31, 1986, the response to C.1. is “N/A” and Questions C.2 through C.4 apply. Note that fish passage for Riverine fish is required only if there is a Mandatory Fish Passage Prescription. If there is no such Prescription, then there is no requirement for Riverine fish passage (Questions C.2 through C.4 apply only to anadromous and catadromous fish).

Question C.2. – Question C.2 applies if there is no Mandatory Fish Passage Prescription pursuant to C.1, and there are historic records of anadromous or catadromous fish movement through the Facility area, but these fish do not presently move through the area. If the record is conflicting, ask: does the weight of the record show that anadromous and/or catadromous fish moved through the facility area on a more than incidental basis? If so, and if the fish are not now present, answer “Yes” and proceed to Question C.2.a. However, if the weight of the conflicting record shows that such movement did not occur, or if there is no record of such movement, the correct answer to Question C.2 is “No” and the Applicant should proceed to Question C.3.

Finally, if anadromous or catadromous fish are present at the Facility today, the correct response is also “No” and the Applicant should proceed to C.3. The Applicant should supply the Institute with all historical information that it relied upon for its position.

Question C.2.a. – If the Applicant can demonstrate that the Facility is not responsible in whole or part for the extinction of the fish or extirpation from the Facility area and downstream reach, the Facility will pass this question. One way that this can be demonstrated is by obtaining a letter to this effect from an official at the U.S. Fish and Wildlife Service or National Marine Fisheries Service who is authorized to make recommendations for the agency in other comparable circumstances, such as in FERC proceedings. If such a letter is not provided and the Applicant is contending that the Facility is not responsible in whole or part for the extinction or extirpation of the fish from the Facility area or downstream reach, the Applicant should supply the Institute with all historical information that it relied upon for its position.

Question C.2.b. – If a Resource Agency has recommended installation of fish passage in the future (either there is a pre-1987 prescription or there is a Recommendation without a prescription as yet), then the Facility owner/operator must make a legally enforceable commitment to provide passage in order to meet the fish passage criterion. If there is no such Recommendation, the correct answer is N/A and the Applicant should proceed to C.3. Documentation provided by the Applicant should include the Resource Agency Recommendation and evidence of the commitment to meet that requirement in the future. The Applicant should seek to obtain a letter from the Resource Agency official authorized to make recommendations for the Resource Agency in other comparable circumstances, such as in FERC proceedings. The letter should confirm that: (1) the Recommendation for future passage is still valid and is the most recent Recommendation from the Resource Agency; and (2) the Facility is in Compliance with that Recommendation. Please see the general instructions above for more guidance regarding this letter.

Question C.3. – Question C.3 applies only if: (a) no Mandatory Fish Passage Prescription has been issued since December 31, 1986; (b) no Resource Agency Recommendation for future fish passage has been issued; and (c) Resource Agencies have had the opportunity to issue a Mandatory Fish Passage Prescription since December 31, 1986 but declined to do so. In this circumstance, the reasons for the Resource Agencies declining to require fish passage become important. If there has been no opportunity for the Resource Agency to issue a fish passage prescription since December 31, 1986, the correct response is “N/A” and the Applicant should proceed to C.4.

Question C.3.c. – Question C.3.c. outlines three reasons for a Resource Agency decision not to require fish passage that will cause a Facility to fail the fish passage criterion. In each case, the reasons relate to the physical nature of the Facility or the environmental impacts that the Facility has caused. The first reason, technological infeasibility of fish passage, is expected to apply primarily to dams which are too high for effective fish passage. However, it may also apply in other situations, such as when a migratory fish species (*e.g.*, sturgeon) is not capable of successfully using fish passage. The second reason is that the Facility has destroyed upstream habitat for the migratory fish, and thus there is no reason to pass fish. The third reason is that the fish are no longer present (*e.g.*, extirpated from the river or extinct), in whole or part as a result of the Facility. In each of these three cases, the Facility cannot be considered to be Low Impact because the Facility has had a direct adverse impact on the migratory fish. Documentation should include evidence of the rationale for the Resource Agency’s decision not to recommend fish passage fully based on factors other than those mentioned. The Applicant should seek to obtain a letter from the Resource Agency official authorized to make recommendations for the Resource Agency in other comparable circumstances, such as in FERC proceedings. The letter should confirm the reasons for declining to issue a Mandatory Fish Passage Prescription for the Facility. Please see the general instructions above for more guidance regarding this letter.

Question C.4. – Question C.4 is applicable if: (a) there is no post-December 31, 1986 Mandatory Fish Passage Prescription; (b) there was not a Recent Resource Agency decision that fish passage is not necessary; and (c) the fish are still present at the Facility. Question C.4 considers the actual performance of the fish passage provisions at the Facility. There are two alternatives for passing this question.

Question C.4.a. – The first alternative is to demonstrate 95% upstream and downstream passage survival rates over 80% of the run. Please provide the studies used to support the survival rate claimed, including methodology, data and conclusions. The Applicant should seek to obtain a letter from the Resource Agency official authorized to make recommendations for the Resource Agency in other comparable circumstances, such as in FERC proceedings. The letter should confirm that the Facility is meeting the stated passage standard. Please see the general instructions above for more guidance regarding this letter.

Question C.4.b. – If the Facility cannot meet the standards in C.4.a, the Applicant may

demonstrate that the upstream and downstream fish passage provisions (if any) at the Facility are adequately protective of the fishery resources. This demonstration must be confirmed through a letter from an official at the U.S. Fish and Wildlife Service or National Marine Fisheries Service who is authorized to make Recommendations for the Agency in other comparable circumstances, such as in FERC proceedings. The letter must state that fish passage (whether present or absent) is acceptable to the Resource Agency and adequately protective of the fishery resource. The letter should also, if possible, refer to the Resource Agency's substantive standards for protection of the resource. A letter simply stating that fish passage provisions have not been required is not sufficient. Because this alternative is being used as a substitute for a Resource Agency's having the opportunity to make a more formal prescription, the letter must be prepared for the purpose of this application; a general letter will not be sufficient, nor will an explanation of why the Applicant was unable to obtain a letter. Documentation should include the letter, and evidence of Compliance with the passage conditions specified in the letter. If no fish passage measures are present and the Facility is a barrier to fish migration, the Resource Agency letter must explain why such measures are not currently warranted and why this can be considered adequately protective of the fishery resource.

Question C.5. – If a Mandatory Fish Passage Prescription for Riverine fish has been issued for the Facility, the Applicant must demonstrate that the Facility is in Compliance with the Prescription. Documentation should include a copy of the Prescription and evidence of Compliance. The Applicant should seek to obtain a letter from the Resource Agency official authorized to make recommendations for the Resource Agency in other comparable circumstances, such as in FERC proceedings. The letter should confirm that: (1) the Mandatory Fish Passage Prescription is still valid and is the most Recent Prescription from the Resource Agency; and (2) the Facility is in Compliance with the Prescription. Please see the general instructions above for more guidance regarding this letter. If a Mandatory Fish Passage Prescription has not been issued for Riverine fish, the response to C.5 is N/A. Note that fish passage for Riverine fish is required only if there is a Mandatory Fish Passage Prescription. If there is no such Prescription, then there is no requirement for Riverine fish passage (Questions C.2 through C.4 apply only to anadromous and catadromous fish).

Question C.6. – This entrainment provision applies to Riverine, anadromous and catadromous fish. Documentation should include the Resource Agency Recommendation and evidence of Compliance. The Applicant should seek to obtain a letter from the Resource Agency official authorized to make recommendations for the Resource Agency in other comparable circumstances, such as in FERC proceedings. The letter should confirm that: (1) the Recommendation is still valid and is the most recent Recommendation from the Resource Agency; and (2) the Facility is in Compliance with the Resource Agency Recommendation. Please see the general instructions above for more guidance regarding this letter. If no entrainment Resource Agency Recommendation was issued, the proper response to Question C.6 is N/A.

D. Watershed Protection:

This criterion is designed to reward projects with an extra three years of certification that have: a

buffer zone extending 200 feet from the high water line or, in the alternative, an approved watershed enhancement fund that could achieve within the project's watershed the ecological and recreational equivalent of land protection in D.1 that has the agreement of appropriate stakeholders and state and federal resource agencies.

A Facility can pass this criterion, but not receive extra years of certification, as long as it is in compliance with both state and federal resource agencies recommendations, if any, in a license approved shoreland management plan regarding protection, mitigation or enhancement of shorelands surrounding the project. (See Details below)

Question D.1. Does the Facility have a buffer zone dedicated for conservation purposes (to protect fish and wildlife habitat, water quality, aesthetics and/or low-impact recreation) extending 200 feet from the average annual high water line around at least 50% of the reservoir, and for all of the undeveloped shoreline? Please provide documentation that demonstrates the existence of this buffer zone (including the applicable legally binding document that creates this buffer zone) and a map that depicts its location at a sufficiently detailed scale and shows the vegetative condition and any designated recreational uses within the buffer zone.

Applicants that answer YES to Question D.1 pass this criterion and earn an additional three years of certification. Applicants that answer NO, go to Question D.2.

Question D.2. Does the Facility have an approved watershed enhancement fund that has the agreement of appropriate stakeholders and state and federal resource agencies and can the enhancement fund achieve within the project's watershed the ecological and recreational equivalent of land protection in D.1? If the answer is YES, please provide documentation that demonstrates the existence of this approved watershed enhancement fund (including the applicable legally binding document that creates it), and all information that explains how and why the enhancement fund achieves the ecological and recreational equivalent of the land protection in D.1.

Applicants that answer YES to Question D.2 pass this criterion and earn an additional three years of certification. Applicants that answer NO, go to Question D.3.

Question D.3. Has a shoreland buffer or equivalent watershed land protection plan for conservation purposes (to protect fish and wildlife habitat, water quality, aesthetics and/or low impact recreation) been established for lands near the Facility through a settlement agreement with appropriate stakeholders, with state and federal resource agencies agreement? Please provide documentation of this shoreland buffer land protection plan and all information that explains its conservation benefits.

Applicants that answer YES to Question D.3 pass this criterion. Applicants that answer NO go to D.4.

Question D.4. Is the facility in compliance with both state and federal resource agencies recommendations in a license approved shoreland management plan regarding protection,

mitigation or enhancement of shorelands surrounding the project. Please provide documentation containing the recommendations in a license approved shoreland management plan, citations to the plan in the federal license and any post-licensing plan reviews or approvals, and evidence of compliance with the plan.

Applicants that answer YES to Question D.4 pass this criterion. Applicants that answer No, fail. If a shoreland management plan was never required, enter N/A, and the criterion is met.

E. Threatened and Endangered Species Protection:

The Threatened and Endangered Species Protection Criterion is designed to ensure that the Facility does not negatively impact state or federal threatened or endangered species. The Facility may pass this criterion in two different ways. The first is a three step process: (1) show Compliance with relevant conditions in the species recovery plan (Question E.2); (2) show Compliance with relevant conditions in an incidental Take permit or statement, biological opinion, habitat conservation plan, or similar state document (Question E.3); and (3) demonstrate that the incidental Take document and/or biological opinion issued relevant to the Facility was designed to be a relatively permanent solution to the endangered species issue (Question E.4). The second way to pass the criterion is to affirmatively demonstrate that the Facility does not affect any listed species (Question E.5.).

Question E.1. -- If the answer to E.1 is YES, please provide documentation of the listing. If the answer is NO, please provide a complete description of the research completed, including sources relied upon, to determine that there are no listed species under either federal or state law.

Question E.2. – In Question E.2, the Applicant must demonstrate that the Facility is in Compliance with all relevant conditions in the recovery plan for the threatened or endangered species. If no recovery plan has been issued, the correct answer to Question E.2 is N/A and the Applicant should proceed to Question E.3. If a recovery plan has been issued, documentation should include the recovery plan and evidence of Compliance. The Applicant should seek to obtain a letter from an official at the Resource Agency that issued the recovery plan who is authorized to make comments on behalf of the Resource Agency regarding listed species in other comparable circumstances, such as in FERC proceedings. The letter should confirm that: (1) the recovery plan is still valid; and (2) the Facility is in Compliance with the all relevant conditions contained in that recovery plan. Please see the general instructions above for more guidance regarding this letter.

Question E.3. – In Question E.3 the Applicant must show Compliance with relevant conditions in an incidental Take permit or statement, biological opinion, habitat conservation plan, or similar state document. If no such authorization has been issued, the correct answer to Question E.3 is N/A and the Applicant must pass this criterion through Question E.5. Documentation should include the relevant endangered species document and evidence of Compliance with conditions in that requirement. The Applicant should seek to obtain a letter from an official at the Resource Agency that issued the document who is authorized to make comments on behalf of the Resource Agency regarding listed species in other comparable circumstances, such as in

FERC proceedings. The letter should confirm that: (1) the document is still valid; and (2) the Facility is in Compliance with all relevant conditions contained in the document. Please see the general instructions above for more guidance regarding this letter.

Question E.4. – If the Facility has received authorization to incidentally Take a listed species, the Applicant must still demonstrate that this authorization was designed to be a relatively permanent solution to the endangered species issue. This can be demonstrated in one of four ways.

Question E.4.a. – First, if the authorization was issued along with long term operational requirements such as a FERC license or habitat conservation plan, this is good evidence that the endangered species resolution was designed to last several decades and the Facility will pass the criterion.

Question E.4.b. – Second, if the biological opinion was issued pursuant to or consistent with a recovery plan, there is also strong evidence that this was designed to be a permanent solution and the Facility will pass the criterion.

Question E.4.c. – Third, the lack of active planning on behalf of the Resource Agencies for a more comprehensive resolution of the endangered species issues is good evidence that the Facility-specific resolution was designed to be relatively permanent, and thus the Facility will pass the criterion. However, if a Resource Agency has set a deadline for completion of a recovery plan within two years, this is a sign that the recovery plan is under active development, and thus the Endangered Species Act operational authority issued to the Facility was not expected to last a long time. If there is no written documentation demonstrating that such a plan is not under development, please provide contact information for the lead resource agency.

Question E.4.d. – Fourth, even if a recovery plan is under active development, the Applicant still has an opportunity to demonstrate that the recovery plan is not likely to have a material affect on the Facility's operations, either because the Facility does not materially affect the conditions of concern to the species or because the Facility is already required to take the actions likely to be required in the recovery plan. This is designed to provide an option only for obvious exclusions to a recovery plan (for example, if the recovery plan will only address water withdrawals and the Facility does not make or affect such withdrawals, or if the Facility is already subject to a long-term habitat conservation plan, the conditions of which the recovery plan may not alter).

Question E.5. – If the relevant Resource Agency has not yet issued the requisite authority to Take listed species, the Facility may pass the criterion if the Applicant can affirmatively demonstrate that the Facility does not affect the species. Documentation should include a basis for the conclusion and supporting studies. The Applicant should seek to obtain a letter from a relevant Resource Agency official who is authorized to make recommendations on behalf of the Resource Agency regarding listed species in other comparable circumstances, such as in FERC proceedings. The letter should confirm that the Facility does not negatively affect the listed

species. Please see the general instructions above for more guidance regarding this letter.

F. Cultural Resource Protection:

The Cultural Resource Protection Criterion is designed to ensure that the Facility does not inappropriately impact Cultural Resources. Cultural Resources must be protected either through Compliance with FERC license or exemption provisions, or through development of a plan approved by the relevant state or federal agency or Native American Tribe. Please provide documentation containing the FERC license or exemption requirements regarding Cultural Resource protection, mitigation and enhancement measures and evidence of compliance with the requirements. If the Facility is not FERC regulated, please provide the owner/operator plan for protection, mitigation of impacts, or enhancement and evidence of compliance with its requirements, or a letter from a senior officer of the relevant agency or Tribe that no plan is needed because Cultural Resources are not negatively affected by the Facility. In both cases, the Applicant should seek to obtain a letter from a relevant agency or Tribal official who is authorized to make recommendations on behalf of the Agency or Tribe regarding cultural resources in other comparable circumstances, such as in FERC proceedings, to demonstrate Compliance with any regulatory requirements or plans.

G. Recreation:

The Recreation Criterion is designed to ensure that the Facility provides access to the waters and accommodates recreational activities. A certified Facility must be in Compliance with provisions of its FERC license or exemption related to recreational access, accommodation and facilities, and with its application the Applicant should provide documents detailing these provisions and evidence of Compliance with them. If not FERC-regulated, a Facility must be in Compliance with similar requirements as Recommended by Resource Agencies and should provide such documentation.

A certified Facility must also provide access to waters without fee or charge. However, if a state or federal agency has prohibited or recommended prohibiting access to any part of the reservoir or downstream reach, this provision does not apply to that area. While access must be free, charges may be imposed for use of project amenities, such as recreational facilities or parking, so long as it is possible to gain access to the reservoir and downstream reach at the Facility without charge. As part of its application, the Applicant should explain the extent of access to waters provided at the Facility, describe any access limitations on Facility lands and the reason for the limitations, and detail fees or charges, if any. If public access is excluded from any areas under the Applicant's ownership or control, a map should be provided showing those areas.

If the Facility has an FERC- or state-approved recreation plan, information on the plan and Compliance with that plan should be provided. If the Facility is licensed, a map of the project boundary should be provided.

The Applicant should seek to obtain a letter from a relevant agency who is authorized to make recommendations on behalf of the Agency regarding public recreation and access in other

comparable circumstances, such as in FERC proceedings, to demonstrate Compliance with any regulatory requirements or plans.

H. Facilities Recommended for Removal:

The Facilities Recommended for Removal Criterion is designed to ensure that the Facility is not certified if there is a Resource Agency Recommendation that a dam associated with the Facility should be removed. If a Resource Agency has recommended removal of a dam associated with the Facility, then the Facility will not qualify for Low Impact Hydropower certification.

LIHI CERTIFICATION HANDBOOK

-- PART VII -- CERTIFICATION QUESTIONNAIRE

** PLEASE SUBMIT THIS QUESTIONNAIRE IN WORD FORMAT **

Background Information	
1) Name of the Facility as used in the FERC license/exemption.	
2) Applicant's name, contact information and relationship to the Facility. If the Applicant is not the Facility owner/operator, also provide the name and contact information for the Facility owner and operator.	
3) Location of Facility including (a) the state in which Facility is located; (b) the river on which Facility is located; (c) the river-mile location of the Facility dam; (d) the river's drainage area in square miles at the Facility intake; (e) the location of other dams on the same river upstream and downstream of the Facility; and (f) the exact latitude and longitude of the Facility dam.	
4) Installed capacity.	
5) Average annual generation.	
6) Regulatory status.	
7) Reservoir volume and surface area measured at the normal maximum operating level.	

8) Area occupied by non-reservoir facilities (<i>e.g.</i> , dam, penstocks, powerhouse).	
9) Number of acres inundated by the Facility.	
10) Number of acres contained in a 200-foot zone extending around entire reservoir.	
11) Contacts for Resource Agencies and non-governmental organizations	
12) Description of the Facility, its mode of operation (<i>i.e.</i> , peaking/run of river) and photographs, maps and diagrams.	
<p>Questions for “New” Facilities Only:</p> <p>If the Facility you are applying for is “new” (<i>i.e.</i>, an existing dam that added or increased power generation capacity after August of 1998) please answer the following questions to determine eligibility for the program</p>	
13) When was the dam associated with the Facility completed?	
14) When did the added or increased generation first generate electricity? If the added or increased generation is not yet operational, please answer question 18 as well.	
15) Did the added or increased power generation capacity require or include any new dam or other diversion structure?	
16) Did the added or increased capacity include or require a change in water flow through the facility that worsened conditions for fish, wildlife, or water quality (for example, did operations change from run-of-river to peaking)?	

<p>17 (a) Was the existing dam recommended for removal or decommissioning by resource agencies, or recommended for removal or decommissioning by a broad representation of interested persons and organizations in the local and/or regional community prior to the added or increased capacity?</p> <p>(b) If you answered “yes” to question 17(a), the Facility is not eligible for certification, unless you can show that the added or increased capacity resulted in specific measures to improve fish, wildlife, or water quality protection at the existing dam. If such measures were a result, please explain.</p>		
<p>18 (a) If the added or increased generation is not yet operational, has the increased or added generation received regulatory authorization (e.g., approval by the Federal Energy Regulatory Commission)? If not, the facility is not eligible for consideration; and</p> <p>(b) Are there any pending appeals or litigation regarding that authorization? If so, the facility is not eligible for consideration.</p>		
<p><i>A. Flows</i></p>	<p>PASS</p>	<p>FAIL</p>
<p>1) Is the Facility in <i>Compliance with Resource Agency Recommendations</i> issued after December 31, 1986 regarding flow conditions for fish and wildlife protection, mitigation and enhancement (including in-stream flows, ramping and peaking rate conditions, and seasonal and episodic instream flow variations) for both the reach below the tailrace and all bypassed reaches?</p>	<p>YES = Pass, Go to B N/A = Go to A2</p>	<p>NO = Fail</p>
<p>2) If there is no flow condition recommended by any Resource Agency for the Facility, or if the recommendation was issued prior to January 1, 1987, is the Facility in Compliance with a flow release schedule, both below the tailrace and in all bypassed reaches, that at a minimum meets Aquatic Base Flow standards or “good”_habitat flow standards calculated using the Montana-Tennant method?</p>	<p>YES = Pass, go to B NO = Go to A3</p>	

3) <i>If the Facility is unable to meet the flow standards in A.2., has the Applicant demonstrated, and obtained a letter from the relevant Resource Agency confirming that demonstration, that the flow conditions at the Facility are appropriately protective of fish, wildlife, and water quality?</i>	YES = Pass, go to B	NO = Fail
B. Water Quality	PASS	FAIL
1) Is the Facility either: a) In Compliance with all conditions issued pursuant to a Clean Water Act Section 401 water quality certification issued for the Facility after December 31, 1986? Or b) In Compliance with the quantitative water quality standards established by the state that support designated uses pursuant to the federal Clean Water Act in the Facility area and in the downstream reach?	YES = Go to B2	NO = Fail
2) Is the Facility area or the downstream reach currently identified by the state as not meeting water quality standards (including narrative and numeric criteria and designated uses) pursuant to Section 303(d) of the Clean Water Act?	YES = Go to B3 NO = Pass	
3) If the answer to question B.2 is yes, has there been a determination that the Facility does not cause, or contribute to, the violation?	YES = Pass	NO = Fail
C. Fish Passage and Protection	PASS	FAIL
1) Is the Facility in Compliance with <i>Mandatory Fish Passage Prescriptions</i> for upstream and downstream passage of anadromous and catadromous fish issued by Resource Agencies after December 31, 1986?	YES = Go to C5 N/A = Go to C2	NO = Fail
2) Are there historic records of anadromous and/or catadromous fish	YES = Go to	

<p>movement through the Facility area, but anadromous and/or catadromous fish do not presently move through the Facility area (e.g., because passage is blocked at a downstream dam or the fish no longer have a migratory run)?</p> <p>a) If the fish are extinct or extirpated from the Facility area or downstream reach, has the Applicant demonstrated that the extinction or extirpation was not due in whole or part to the Facility?</p> <p>b) If a Resource Agency Recommended adoption of upstream and/or downstream fish passage measures at a specific future date, or when a triggering event occurs (such as completion of passage through a downstream obstruction or the completion of a specified process), has the Facility owner/operator made a legally enforceable commitment to provide such passage?</p>	<p>C2a NO = Go to C3</p> <p>YES = Go to C2b N/A = Go to C2b</p> <p>YES = Go to C5 N/A = Go to C3</p>	<p>NO = Fail</p> <p>NO = Fail</p>
<p>3) If, since December 31, 1986:</p> <p>a) Resource Agencies have had the opportunity to issue, and considered issuing, a Mandatory Fish Passage Prescription for upstream and/or downstream passage of anadromous or catadromous fish (including delayed installation as described in C2a above), and</p> <p>b) The Resource Agencies declined to issue a Mandatory Fish Passage Prescription,</p> <p>c) Was a reason for the Resource Agencies' declining to issue a Mandatory Fish Passage Prescription one of the following: (1) the technological infeasibility of passage, (2) the absence of habitat upstream of the Facility due at least in part to inundation by the Facility impoundment, or (3) the anadromous or catadromous fish are no longer</p>	<p>NO = Go to C5 N/A = Go to C4</p>	<p>YES = Fail</p>

present in the Facility area and/or downstream reach due in whole or part to the presence of the Facility?		
4) If C3 was not applicable: a) Are upstream and downstream fish passage survival rates for anadromous and catadromous fish at the dam each documented at greater than 95% over 80% of the run using a generally accepted monitoring methodology? Or b) If the Facility is unable to meet the fish passage standards in 4.a, has the Applicant either i) demonstrated, and obtained a letter from the U.S. Fish and Wildlife Service or National Marine Fisheries Service confirming that demonstration, that the upstream and downstream fish passage measures (if any) at the Facility are appropriately protective of the fishery resource, or ii) committed to the provision of fish passage measures in the future and obtained a letter from the U.S. Fish and Wildlife Service or the National Marine Fisheries Service indicating that passage measures are not currently warranted?	YES = Go to C5	NO = Fail
5) Is the Facility in Compliance with Mandatory Fish Passage Prescriptions for upstream and/or downstream passage of <i>Riverine</i> fish?	YES = Go to C6 N/A = Go to C6	NO = Fail
6) Is the Facility in Compliance with Resource Agency Recommendations for Riverine, anadromous and catadromous fish entrainment protection, such as tailrace barriers?	YES = Pass, go to D N/A = Pass, go to D	NO = Fail
D. Watershed Protection	PASS	FAIL
1) Is there a buffer zone dedicated for conservation purposes (to protect fish and wildlife habitat, water quality, aesthetics and/or low-impact recreation) extending 200 feet from the average annual high water line for at least 50% of the shoreline, including all of the undeveloped shoreline?	YES = Pass, go to E and receive 3	NO = go to D2

	extra years of certification	
2) Has the Facility owner/operator established an approved watershed enhancement fund that: 1) could achieve within the project's watershed the ecological and recreational equivalent of land protection in D.1, and 2) has the agreement of appropriate stakeholders and state and federal resource agencies?	YES = Pass, go to E and receive 3 extra years of certification	NO = go to D3
3) Has the Facility owner/operator established through a settlement agreement with appropriate stakeholders, with state and federal resource agencies agreement, an appropriate shoreland buffer or equivalent watershed land protection plan for conservation purposes (to protect fish and wildlife habitat, water quality, aesthetics and/or low impact recreation)?	YES = Pass, go to E	NO = go to D4
4) Is the facility in compliance with both state and federal resource agencies recommendations in a license approved shoreland management plan regarding protection, mitigation or enhancement of shorelands surrounding the project?	YES = Pass, go to E N/A = Pass go to E	No = Fail
E. Threatened and Endangered Species Protection	PASS	FAIL
1) Are threatened or endangered species listed under state or federal Endangered Species Acts present in the Facility area and/or downstream reach?	YES = Go to E2 NO = Pass, go to F	
2) If a recovery plan has been adopted for the threatened or endangered species pursuant to Section 4(f) of the Endangered Species Act or similar state provision, is the Facility in Compliance with all recommendations in the plan relevant to the Facility?	YES = Go to E3 N/A = Go to E3	NO = Fail
3) If the Facility has received authorization to incidentally <i>Take</i> a listed species through: (i) Having a relevant agency complete consultation pursuant to ESA Section 7 resulting in a biological opinion, a habitat recovery plan, and/or (if needed) an incidental Take statement; (ii) Obtaining an incidental Take permit pursuant to ESA Section 10; or (iii) For species listed by a state and not by the federal government, obtaining	YES = Go to E4 N/A = Go to E5	NO = Fail

authorization pursuant to similar state procedures; is the Facility in Compliance with conditions pursuant to that authorization?		
4) If a biological opinion applicable to the Facility for the threatened or endangered species has been issued, can the Applicant demonstrate that: a) The biological opinion was accompanied by a FERC license or exemption or a habitat conservation plan? Or b) The biological opinion was issued pursuant to or consistent with a recovery plan for the endangered or threatened species? Or c) There is no recovery plan for the threatened or endangered species under active development by the relevant Resource Agency? Or d) The recovery plan under active development will have no material effect on the Facility's operations?	YES = Pass, go to F	NO = Fail
5) If E.2 and E.3 are not applicable, has the Applicant demonstrated that the Facility and Facility operations do not negatively affect listed species?	YES = Pass, go to F	NO = Fail
F. Cultural Resource Protection	PASS	FAIL
1) If FERC-regulated, is the Facility in Compliance with all requirements regarding Cultural Resource protection, mitigation or enhancement included in the FERC license or exemption?	YES = Pass, go to G N/A = Go to F2	NO = Fail
2) If not FERC-regulated, does the Facility owner/operator have in place (and is in Compliance with) a plan for the protection, mitigation or enhancement of impacts to Cultural Resources approved by the relevant state or federal agency or <i>Native American Tribe</i> , or a letter from a senior officer of the relevant agency or Tribe that no plan is needed because Cultural Resources are not negatively affected by the Facility?	YES = Pass, go to G	NO = Fail

G. Recreation	PASS	FAIL
1) If FERC-regulated, is the Facility in Compliance with the recreational access, accommodation (including recreational flow releases) and facilities conditions in its FERC license or exemption?	YES = Go to G3 N/A = Go to G2	NO = Fail
2) If not FERC-regulated, does the Facility provide recreational access, accommodation (including recreational flow releases) and facilities, as Recommended by Resource Agencies or other agencies responsible for recreation?	YES = Go to G3	NO = Fail
3) Does the Facility allow access to the reservoir and downstream reaches without fees or charges?	YES = Pass, go to H	NO = Fail
H. Facilities Recommended for Removal	PASS	FAIL
1) Is there a Resource Agency Recommendation for removal of the dam associated with the Facility?	NO = Pass, Facility is Low Impact	YES = Fail

LIHI CERTIFICATION HANDBOOK

-- PART VII --

CERTIFICATION PROGRAM FEE SCHEDULE

(Revised June 2011)

I. Fee Schedule for Review of New Application for Certification

A new application for certification is subject to two separate processing fees by LIHI: a fee for “Intake Review” and, if an applicant decides to continue to pursue certification following the completion of Intake Review, a fee for “Completion Review.” Together these two fees comprise the “Total Certification Fee” that LIHI will charge applicants to review a new application for certification.

A. Fee Schedule for Intake Review -- All applicants, regardless of the size of a Facility or the amount of its annual generation, must pay a one-time, non-refundable fee of \$750.00, to cover the cost to LIHI of an Intake Review.

B. Fee Schedule for Completion Review -- The chart below sets forth the *minimum* fee that an Applicant will be charged by LIHI to complete its certification review, following the initial Intake Review. The actual fee for the Completion Review will be established by LIHI at the close of the Intake Review process, and may be higher than the minimum fees set forth below, depending upon the complexity of the application, information that may be missing, and the time LIHI estimates will be required for a complete review.

Average Annual Generation from the Facility (in Gigawatt* hours)	Minimum Completion Review Fee
0 to 20.4	\$850
21.5 to 43.8	\$1,750
43.9 to 87.6	\$4,250
87.7 to 131.4	\$6,750
131.5 to 219.0	\$9,500
219.1 to 306.6	\$12,250
306.7 to 394.2	\$15,000
394.3 to 481.8	\$17,7500
481.9 to 569.4	\$20,250
569.5 to 657.0	\$22,250
657.1 to 744.6	\$24,750
744.7 to 832.2	\$26,750
832.3 to 919.8	\$29,250
919.9 to 1,007.4	\$31,750

1,007.5 to 1,095.0	\$34,250
1,095.1 to 1,183.0	\$36,750
1,183.1 to 1,270.2	\$39,250
1,270.3 to 1,357.8	\$41,750
1,357.9 to 1,445.4	\$44,250
1,445.5 to 1,533.0	\$46,750
1,533.1 to 1,620.6	\$49,250
1,620.7 to 1,708.2	\$51,750
1,708.3 to 1,795.8	\$54,250
1,795.9 and above	\$56,750

*1 gigawatt hour = 1,000 megawatt hours = 1 million kilowatt hours

Additional Information to Note:

▶ **Fee supplement for consolidated application seeking certification for multiple Facilities:**

A consolidated, single application may be submitted by an Applicant that owns or operates multiple facilities in a watershed that are operationally or hydrologically connected. For each additional Facility for which an Applicant seeks certification from LIHI that is part of a consolidated, single application to LIHI, the Applicant will be charged a supplemental Intake Review fee of \$250.00 per additional Facility, and a supplemental Completion Review fee of \$2000.00 per each additional Facility.

▶ **Calculation of average annual generation:**

Average annual generation (for determination of the minimum Completion Review fee) shall be calculated based on the ten-year average preceding the date of application (when available). For capacity added after 1998, average annual generation shall be calculated based on a three-year average, or the anticipated average annual generation if operational less than 3 years. Documentation of average annual generation must accompany the fee.

▶ **Application Fee Premium for “Pre-Operations” Certification of a “new” facility:**

The Completion Review fee amount for an application for pre-operations certification of a “new” facility shall include a 10 percent fee premium calculated from the total fee charged.

Reductions in the application fee may be available under certain circumstances. Please contact the Institute for details.

II. Annual Fee for all LIHI Certified Projects

For the term of the certification, each certified project shall pay to LIHI on an annual basis a fee equal to 15% of the Total Certification Fee. This annual fee is due on the anniversary of the date that certification commenced, with the first payment due one year after the date of

commencement of certification.

Implementation Schedule:

All applicants for certification that have filed an initial Application with LIHI after October 1, 2007 will be invoiced an Annual Fee⁴ on the first anniversary of their certification date in accordance with Attachment C.

All existing certificate holders filing for recertification after October 1, 2007 will be billed the recertification processing fee and after the first anniversary of their certification date will be invoiced an Annual Fee in accordance with Attachment C. The certificate holder will not be charged an Annual Fee during the year the Recertification Processing Fee has been invoiced.

LIHI will not invoice projects that have been certified or recertified prior to October 1, 2007, however we plan to make an annual appeal for these certificate holders to make a donation to LIHI.

III. Re-Certification: Fee Schedule and Application Process for Renewing Certification at End of Original Term

Each applicant for re-certification will be charged a base fee amounting to 20% of the original Total Certification Fee + inflation. However, this base fee amount may be increased if re-certification review involves applying LIHI criteria that are new or have been amended since the original certification was issued, or if material changes have occurred at the Facility, in order to cover the costs of hiring an Application Reviewer. A complete description of the circumstances surrounding when the re-certification base fee may be increased is found Part V, Section IV.B. of this *Handbook*.

⁴ Annual Fee invoicing will be coordinated with the Annual Compliance mailing sent to all certificate holders on their first and subsequent anniversaries.

LOW IMPACT HYDROPOWER HANDBOOK

-- APPENXDIX A --

GOVERNING BOARD MEMBERS & ADVISORY PANEL MEMBERS (as of July, 2011)

Governing Board Chair:

Richard Roos-Collins, Water and Power Law Group (CA)

Governing Board Members:

Nathanael Greene, Natural Resources Defense Council (NY)
Dana Hall, Consultant (NY)
Kenneth Kimball, Appalachian Mountain Club (NH)
Steven Malloch, National Wildlife Federation (WA)
Jeff Opperman, The Nature Conservancy (OH)
Michael Sale, Consultant (TN)
John Seebach, American Rivers (DC)
Victoria Taylor, Catawba-Wateree Relicensing Coalition (NC)
Laura Wisland, Union of Concerned Scientists (CA)

Hydropower Industry Advisory Panel Members:

Shannon Ames, Brookfield Power (MA)
Corrine Grande, Seattle City Light (WA), Co-Chair
Cleve Kapala, TransCanada (NH)
Julie Keil, Portland General Electric (OR)
Deb Malin, Bonneville Power Administration (OR)
Gary Marcus, Frontier Technologies (OR)
Andrew Sims, Kleinschmidt (ME), Co-Chair

Renewables Advisory Panel Members:

Angus Duncan, Bonneville Environmental Foundation (OR)
Alan J. Noguee, Union of Concerned Scientists (MA)
Phillip Raphals, Helios Centre, (Quebec), Chair