

LOW IMPACT HYDROPOWER INSTITUTE

CERTIFICATION QUESTIONNAIRE

APRIL, 2014 REVISION

Background Information	
1) Name of the Facility as used in the FERC license/exemption.	Dodge Falls Project
2) Applicant's name, contact information and relationship to the Facility. Please use the Project Contact Form in Appendix D.	See Appendix D
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.	(a) New Hampshire and Vermont (b) Connecticut River (c) River mile 268 (d) 2,644 square miles (e) See Appendix 3-1 (f) Latitude: 44°12'29.32"N, Longitude: 72° 3'26.36"W
4) Installed capacity.	5.0 MW
5) Average annual generation.	26.0 GWh
6) Regulatory status.	See Appendix 1
7) Reservoir volume and surface area measured at the normal maximum operating level.	Surface Area: 290 Acres Gross Reservoir Volume: 4,940 Acre-Feet Net Storage Capacity: 0 (run-of-river)
8) Area occupied by non-reservoir facilities (e.g., dam, penstocks,	Less than 1.5 acres

powerhouse).	
9) Number of acres inundated by the Facility.	Approximately 290
10) Number of acres contained in a 200-foot zone extending around entire reservoir.	Approximately 97
11) Contacts for Resource Agencies and non-governmental organizations	See Appendix 2
12) Description of the Facility, its mode of operation (i.e., peaking/run of river) and photographs, maps and diagrams.	See Appendix 3
Questions for “New” Facilities Only: If the Facility you are applying for is “new” (i.e., 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.	N/A
13) When was the dam associated with the Facility completed?	N/A
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.	N/A
15) Did the added or increased power generation capacity require or include any new dam or other diversion structure?	N/A
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)?	N/A
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	N/A

<p>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>	N/A	
A. Flows	PASS	FAIL
<p>1) Is the Facility in Compliance with Resource Agency Recommendations 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>	N/A	
<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: the project is run-of-river. A minimum flow of 1108cfs (0.5 csm) or project inflow, if less, is required and maintained. See also Appendix 4</p>	

3) 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?	N/A	
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?	(a) No (b) Yes. See Appendix 5	
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?	No See Appendix 5	
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?	N/A	
C. Fish Passage and Protection	PASS	FAIL
1) Are anadromous and/or catadromous fish present in the Facility area or are they know to have been present historically?	Yes. See Appendix 6	
2) Is the Facility in Compliance with Mandatory Fish Passage Prescriptions for upstream and downstream passage of anadromous and catadromous fish	Yes	

issued by Resource Agencies after December 31, 1986?		
<p>3) Are there historic records of anadromous and/or catadromous fish 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>(a) Yes</p> <p>(b) Yes. See Appendix 6</p>	
<p>4) 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 C.3.a 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</p>	N/A	

the Facility due at least in part to inundation by the Facility impoundment, or (3) the anadromous or catadromous fish are no longer present in the Facility area and/or downstream reach due in whole or part to the presence of the Facility?		
<p>5) If C4 was not applicable:</p> <p>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</p> <p>b) If the Facility is unable to meet the fish passage standards in 5.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?</p>	N/A	
6) Is the Facility in Compliance with Mandatory Fish Passage Prescriptions for upstream and/or downstream passage of Riverine fish?	None prescribed	
7) Is the Facility in Compliance with Resource Agency Recommendations for Riverine, anadromous and catadromous fish entrainment protection, such as tailrace barriers?	None prescribed	
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?	No	
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?	No	
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)?	No	
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?	None prescribed. See Appendix 7	
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?	No See Appendix 8	
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?	N/A	

3) If the Facility has received authorization to incidentally Take 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 authorization pursuant to similar state procedures; is the Facility in Compliance with conditions pursuant to that authorization?	N/A	
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?	N/A	
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?	N/A	
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 See Appendix 9	
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 Native American Tribe, 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?	N/A	
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. See Appendix 9	
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?	N/A	
3) Does the Facility allow access to the reservoir and downstream reaches without fees or charges?	Yes	
H. Facilities Recommended for Removal	PASS	FAIL
1) Is there a Resource Agency Recommendation for removal of the dam associated with the Facility?	No	

APPENDIX D – PROJECT CONTACT FORM

Project Name: Dodge Falls Project FERC No. 8011

Project Owner/Operator:

Name and Title: Robert Thorton & Paul Kidder

Company: Dodge Falls Associates L.P.

Phone: 617-367-0032

Email address: rthornton@essexhydro.com & pkidder@essexhydro.com

Please include this email address in LIHI e-newsletter distribution: No

Mailing Address Essex Hydro Associates, L.L.C. 55 Union Street, 4th Floor Boston, MA 02108

Consulting firm that manages LIHI program participation (if applicable):

Name N/A

Company

Phone

Email address

Please include this email address in LIHI e-newsletter distribution

Mailing Address

Party responsible for compliance with LIHI certification requirements:

Name and Title Stephen Hickey, Coordinator of Environmental Attributes

Phone 617-367-0032

Email address sjh@essexhydro.com

Please include this email address in LIHI e-newsletter distribution Yes

Mailing Address Essex Hydro Associates, L.L.C. 55 Union Street, 4th Floor Boston, MA 02108


Party responsible for accounts payable:

Name and Title Maureen Donnelly

Phone: 617-367-0032

Email address mdonnelly@essexhydro.com

Mailing Address Essex Hydro Associates, L.L.C. 55 Union Street, 4th Floor Boston, MA 02108


Project Owner/Operator Signature

Treasurer RFE Dodge Falls Inc.
General Partner Dodge Falls, LP

5/19/2014

Date

Appendix 1

Ownership/Regulatory Status

The Dodge Falls project went through a lengthy and difficult development period prior to the actual construction and initial operation of what is now the Dodge Falls Associates L.P. ("DFA") hydroelectric project. During the development period there were several changes in the organization and ownership of the DFA project and related interests as well as several changes in the design and location of the DFA project.

Initial developments efforts were made through Dodge Falls Hydro Corporation ("DFHC"). On January 30, 1984 DFHC submitted an Application for Exemption from Licensing to the Federal Energy Regulatory Commission ("FERC"). This application was based upon a project design that located the powerhouse on the Vermont side of the Dodge Falls dam in Ryegate, Vermont. On June 11, 1984 the FERC issued an Order Granting Exemption From Licensing to DFHC (FERC Project 8011). A copy of the Exemption is attached as Appendix 1-1.

Subsequent to receipt of the initial exemption order from the FERC (1984), DFHC determined that project development was infeasible on the Vermont side of the river. The design was modified to relocate the powerhouse to the New Hampshire side of the river. In November 1985 DFHC submitted an Application for Amendment for Exemption from Licensing that reflected the location change (see Appendix 1-2). On June 26, 1986 the FERC issued a letter in which it found that the proposed changes did not materially alter the terms of the original exemption issued in 1984 and dismissed the amended exemption request as moot (see Appendix 1-3). As a part of the development process DFHC also received a Certificate of Public Good from the Vermont Public Service Board pursuant to 30 V.S.A. Section 248 (see Appendix 1-4).

On December 9, 1988 DFHC assigned all of its interests in the FERC Exemption to Dodge Falls Associates, a New York Limited Partnership (see Appendix 1-5). Dodge Falls Associates subsequently was reorganized as a Delaware limited partnership, Dodge Falls Associates, L.P. ("DFA"). As you will note in many of the documents, there are many references to HYDRA-CO Enterprises, Inc ("HYDRA-CO"). HYDRA-CO was an

affiliated company under contract to DFA that was responsible for completing many of the development tasks prior to and during construction of the DF Plant. DFA was and is the actual owner of the facilities. Construction of the DF Project was completed in 1990.

On May 3, 1993, DFA filed a request with the FERC to amend its exemption to replace existing pin supported wooden flashboards on the overflow spillway with an inflatable rubber dam. On December 13, 1993 the FERC issued an order amending the 1984 exemption that modified the project description and approved installation of the rubber dam (see Appendix 1-6). No agency comments were noted at that time and the amendment was granted without further conditions.

On April 23, 1997 DFA submitted a further request to the FERC for approval to install a rubber dam (pneumatic crest gate system) on the remaining part of the Dodge Falls dam. In this instance the FERC determined that an amendment to the exemption was not required and issued a letter on May 13, 1997 that authorized installation of a rubber dam on the main spillway section of the dam (see Appendix 1-7).

There have been no changes in the regulatory status of the DF project since 1997 nor have there been any agency comments noting deficiencies in DFA's compliance with various conditions contained in the documents related to the FERC exemption and agency review of the project.

Appendix 2

List of Authorities/Agencies Contacted

Federal

John Warner
U.S. Fish & Wildlife Service
70 Commercial Street, suite 300
Concord, NH 03301-5087
Tel: 603-223-2541 ext 15
Email: John_Warner@fws.gov
Date last contacted: April 29, 2014
Request for comment

State

Ted Walsh
New Hampshire DES
29 Hazen Drive
Concord, NH 03301
Tel: 603-271-2083
Email: Ted.Walsh@des.nh.gov
Date last contacted: Sept 24, 2013
Request for Water Sampling Plan

Federal (continued)

Kevin Mendik
National Park Service
15 State Street
Boston, MA 02109
Tel: 617-223-5299
Email: kevin_mendik@nps.gov
Date last contacted: April 29, 2014
Request for comment

John Eddins
Advisory Council on Historic
Preservation
Old Post Office Building
1100 Pennsylvania Avenue, NW,
Suite 803
Washington, DC 20004
Tel: 202-606-8503
Email: jeddins@achp.gov
Date of last contact: April 29, 2014
Request for Comment

State (continued)

Carol Henderson
Fish & Wildlife Ecologist
New Hampshire Fish and Game
Department
11 Hazen Drive
Concord, NH 03301
Tel: 603-271-3511
Email:
Carol.Henderson@wildlife.nh.gov
Date last contacted: May 7, 2014
Nature of last contact: Request for
Comment

NH Division of Historical
Resources
State Historic Preservation Office
Attn: Review and Compliance
19 Pillsbury Street
Concord, NH 03301-3570
Tel: 802-828-3050
Email:
Giovanna.peebles@state.vt.us
Date last contacted: April 29, 2014
Rqst for comment

NH Natural Heritage Bureau
DRED
Division of Forests and Lands
172 Pembroke Road
Concord, NH 03302-1856
Tel: 603-271-6488
Email: mcoppola@dred.state.nh.us
Date last contacted: April 29, 2014
Request for Comment

State (continued)

Jeff Crocker
VT Department of Environmental
Conservation
1 National Life Drive, Main 2
Montpelier, VT 05620-3522
Tel: 802-490-6151
Email: Jeff.Crocker@state.vt.us
Date of last contact: April 7, 2014
Receipt of comments

Ed O'Leary
Director of Operations
Dept. of Forests, Parks &
Recreation
1 National Life Drive
Montpelier, VT 05620-3801
Tel: 802-793-3712
Email: ed.oleary@state.vt.us
Date of last contact: April 7, 2014
Request for comment

Rod Wentworth
Aquatic Habitat Scientist
Fish and Wildlife Department
Agency of Natural Resources
1 National Life Drive
Floor North 2
Montpelier, VT 05620-3702
Tel: 802-241-3700
Email: rod.wentworth@state.vt.us
Date of last contact: April 7, 2014
Request for comment

Appendix 3

Project Location and Operations

The Dodge Falls Associates hydroelectric facility (the DF Facility) is located at river Mile 268 on the Connecticut River in the towns of Bath, New Hampshire and Ryegate, Vermont (see Appendix 3-1). The hydroelectric station was constructed at the site of the existing Dodge Falls dam. The dam ("DF dam" or "Ryegate dam") was used until 1966 to provide waterpower to a paper mill located on the Vermont side of the river. From 1966 until 1990 process water was supplied to the paper mill with excess flow discharged over the dam. When the Dodge Falls project began operation in 1990, most of the river flow then was used for hydroelectric generation with the paper mill receiving up to 5 cfs for process use. In 2000 the paper mill was shutdown and papermaking machinery was removed from the mill. The dam is 485 feet long and consists of a grouted, rock fill, timber crib with a timber crest and wood plank facing. The crest elevation of the dam is 421.4 feet NGVD and is about 15.5 feet above the bedrock streambed at the downstream toe. Initially the project was authorized to install 2 feet of pin supported wooden flashboards to reestablish the historic level of the impoundment.

In 1988 construction began on the DF project and was completed in 1990. The DF project consists of a reinforced concrete powerhouse located on the New Hampshire side of the river with a 75-foot side concrete spillway constructed on the right side of the fore bay. The spillway is connected to the timber crib dam.

The DF project was operated from 1990 to 1993 using pin supported wooden flashboards. In 1993 a two-foot rubber pneumatic flashboard system was installed on the concrete spillway to replace a portion of the pin supported wooden flashboard system. In 1997 a two-foot rubber pneumatic flashboard system was installed on the timber crib dam to replace the remaining wooden flashboards. A single double regulated 5000 kW Escher Wyse turbine, rated at 12 feet of head and a flow of 5800 cfs, is installed in the powerhouse.

The DF Facility is operated as a run of river facility. Reservoir level is maintained by means of a pond level control system. The project is required

to maintain a minimum flow of 1108 cfs (0.5 csm) or project inflow, whichever is less. The DF Facility is located immediately downstream of the Fifteen Mills Falls Hydroelectric Project ("the FMF project")(FERC # 2077). The FMF project consists of three separate dams and powerhouses located upstream from the DF project. The closest FMF project, the McIndoes power station, is located approximately 4 miles upstream of the DF project. Since the DF project is a run of river project, available river flow for the DF project is determined by discharge from the McIndoes project.

Appendix 4

Description of Project flows

The project is operated as a strict run of river facility. Reservoir level is maintained at the top of the flashboards through operation of a pond level control system. The project is required to maintain a minimum flow of 1108 cfs (0.5 csm) or project inflow, if less.

As noted in Appendix 2, project inflow is controlled by the flow discharged from the McIndoes hydroelectric station, a part of the Fifteen Mile Falls Project (FERC# 2077). The station is located approximately 4 miles upstream from the Dodge Falls dam. At the time the DF project was licensed and constructed the McIndoes station did not have a minimum flow discharge requirement. From commencement of generation at Dodge Falls in 1990 until 2003, inflow to the Dodge Falls reservoir periodically was interrupted during ponding periods at the McIndoes project. The Dodge Falls project would note a decrease in pond level and the turbine generator would be shutdown until inflow was restored by the McIndoes project. The water quality certificate issued to the Dodge Falls project (see Appendix 4-1) recognized the effect the McIndoes project would have on the operation of the Dodge Falls project and allowed a reservoir draw down of up to 3.0 inches to accommodate the frequent fluctuations in McIndoes station flow discharge. During shutdown periods a continuous flow of 530 cfs was required to be maintained below the project until the reservoir level was built up to reestablish turbine operation and or spillage.

The Fifteen Mile Falls project was relicensed in 2002. Under the new license the McIndoes station is required to maintain a minimum flow that varies

during the year. From June 1 through September 30 McIndoes is required to maintain a discharge of 1,105 cfs, or inflow, whichever is less. From October 1 - March 31 the minimum flow is 2,210 cfs, or inflow, whichever is less. From April 1 - May 31 the minimum flow is 4,420 cfs, of inflow, whichever is less (see Appendix 4-2). This had had a direct effect on DF project operations. The Dodge Falls project now operates strictly as a run-of-river project. Because the minimum flow from the McIndoes station now is greater than the minimum flow shutoff point of the Dodge Falls turbine, the turbine is able to operate continuously and no longer needs nor uses the 3-inch draw down permitted in its Water Quality Certification. When the Dodge Falls turbine is shutdown, river inflow is discharged over the pneumatic flashboards.

Appendix 5

Water Quality

The DFA project received a 401 Water Quality Certificate from the Vermont Department of Water Resources and Environmental Engineering ("VtDEC") on March 29, 1986 (see Appendix 4-1). The NH Water Supply and Pollution Commission also issued a Water Quality Certification dated May 19, 1986. The NH certification specifically found the DFA plant to be in compliance with Section 303(d) of the Clean Water Act. (see Appendix 5-1). The DFA project did not receive any comments relative to water quality at the time the project FERC exemption was amended in 1993 nor has the project received any notice that it is not in compliance with Section 303(d) of the Clean Water Act 1993. The most recent New Hampshire 2012 Section 305(b) and 303(d) Surface Water Quality Report determined that no parameter of the Connecticut River within the town of Bath, NH was "threatened" (see Appendix 5-2).

One of the conditions contained in the DF project VtDEC 401 Water Quality Certification required DFA to conduct water sampling in the downstream areas of the DFA dam. Kleinschmidt Associates ("KA") was hired to conduct this study. KA prepared a sampling plan that was reviewed and approved by the VtDEC (see Appendix 5-3). On September 9, 1991 KA

issued its report of water quality sampling in the area of the DF project area. The report concluded that the river was easily meeting its designated classification without spillage at the dam (see Appendix 5-4).

Please note that the sampling completed by KA was done at a time the McIndoes plant did not have a minimum flow discharge requirement. Moreover, the paper mill on the opposite side of the river from the DF plant was operating and discharging treated secondary effluent into the downstream reach of the river.

Since that report was completed the McIndoes plant now operates with a minimum flow requirement and the paper mill has shutdown, thereby improving what already had been found to be acceptable water quality in the vicinity of the DF plant.

Dodge Falls has requested a water quality sampling plan (the "sampling plan") from Ted Walsh, Surface Water Quality Monitor with the New Hampshire Department of Environmental Services. (see Appendix 5-5) Dodge Falls will complete the sampling plan as required under low flows between June 1 and September 1, 2014. The results will be submitted to NH DES and their analysis will be forwarded to LIHI for inclusion in this application. Dodge Falls fully expects that their report will show that the Dodge Falls project does not cause or contribute to violations of New Hampshire State Water Quality Standards.

Appendix 6

Fish Passage and Protection

As a condition of issuance, the FERC Exemption requires Dodge Falls Associates LP ("DFA") to comply with any terms and conditions that Federal and State fish and wildlife agencies have determined appropriate for the Dodge Falls project. The FERC reserved the right to revoke the exemption if any term or condition of the exemption was violated. DFA believes this condition constitutes a legal obligation to install fish passage facilities.

In its FERC Exemption application dated November 1985, DFA agreed to comply with comments of the US Department of Interior, the National

Oceanic and Atmospheric Administration; the U. S. Fish and Wildlife Service; the New Hampshire Fish and Game Department, , and the Vermont Agency of Environmental Conservation. Letters from each of those agencies are included as appendices 6.1-6.4. The agencies concurred that the fish passage facilities required for the DF project included installation of downstream fish passage and installation of a fish trapping structure at the Dodge Falls Dam by 1992.

On August 29, 1985 the New Hampshire fish and game Department provided updated comments relative to its requirements when the NH site location was moved to the New Hampshire side of the river (see Appendix 6.5). On October 19, 1990 the U.S. fish and Wildlife Service (F&WS) sent a letter that reiterated the requirement that a downstream fish passage facility be installed at the DFA project. However, in that letter the F&WS acknowledged that it might not be necessary to install the fish trap facility in 1992. The letter stated that DFA would be notified by the Connecticut River Atlantic Salmon Commission ("CRASC") of the timing of construction of the fish trap facility once the ASC completed its position regarding fish passage installation on the entire Connecticut River (see Appendix 6.6).

Subsequently, DFA installed the downstream fish passage and has successfully operated the downstream passage facility in accordance with an annual directive issued by the CRASC. A copy of the most recent correspondence from the CRASC dated March 13, 2014 is included. It notes that the DFA project has cooperated with the CRASC. No deficiencies were noted in the letter nor have there been any previous deficiencies noted regarding operation of the downstream fish passage (see Appendix 6.7).

The fish trapping structure has not yet been constructed. DFA has received no notice from the CRASC concerning a required construction date for the fish trapping facility in spite of regular contact with the CRASC. DFA understands that installation has been delayed due to unanticipated delays in the construction of fish passage facilities at dams downstream of the DFA dam and the lack of salmon returns at the Wilder dam, the closest dam downstream from the DF project.

As related evidence re DFA compliance with fish passage requirements, the issue of upstream fish passage was addressed in the FMF relicensing proceeding. As a condition of the FMF FERC license issued on April 8, 2002, the FMF project is required to provide upstream fish passage at the

McIndoes dam when 20 salmon reach the DFA dam for two consecutive years and the fishery agencies find the need for upstream fish passage is justified. However, the license further provides that at the request of the New Hampshire Fish and Game Department, the Vermont Department of Fish and wildlife, the U.S. fish and Wildlife Service and the Ct. River Atlantic Salmon Commission, FMF may participate in trap and truck facility construction and operation at the DF dam in substitution for permanent upstream facilities at the McIndoes dam (see Appendix 6.8). DFA believes this recent review by the FERC and all other affected fish agencies provides recent evidence that DFA is in compliance with fish passage requirements at the DF dam.

As part of its application for re certification as a low impact hydropower facility, DFA contacted via email all of the relevant hydroelectric agencies it originally consulted with during the initial certification of the project in 2009. See Appendices 6.9 – 6.12. Responses were received from Jeff Crocker, River Ecologist with the Vermont Department of Environmental Conservation, on behalf of the Vermont agencies contacted and Ted Walsh, Surface Water Quality Monitor with the New Hampshire Department of Environmental Services. Both agencies require water quality sampling to be conducted between June 1 and September 1, 2014 before they will comment on DFA's application for re certification of the DF Facility. The other agencies were instructed via email that failure to respond would result in DFA submitting its application for re certification and indicate no comment from those agencies.

Appendix 7

Description of Watershed Protection

The watershed area formed by the DF dam impoundment extends approximately 4 miles north of the DF dam to the tailrace of the McIndoes plant. A 200 foot boundary area would encompass approximately 90 acres. The river is paralleled by paved highways and, on the Vermont side, by interstate 91. The steep banks and rock outcrops between the Dodge Falls dam north to McIndoe Falls, provide for little developable land and there are only a few homes and farm buildings, none near the river's steep shoreline on the west by interstate 91 (see Appendix 7-1). All of this land other than in the immediate vicinity of the DF dam is privately owned. The east bank of

the river at the Dodge Falls Dam includes steep banks, rock outcrops, and, downstream from the dam, a rock and sand shoreline. By its nature, the watershed area naturally protects fish and wildlife habitat by its topography and lack of public access.

In the immediate vicinity of the project site, forests cover terrace slopes and upper portions of ledges, while sparse communities of plants, primarily annuals, are found on the narrow strip of exposed rock and the sand/rock shoreline of the river. Between McIndoe Falls and Monroe, about 4 miles upstream of the DF facility, and Wells River and Woodsville, 4.6 miles downstream, the land on both sides of the river is relatively undeveloped except for the village and mill at East Ryegate adjacent to the dam, (see satellite image in Appendix 7-1).

The flows below the DF facility have minimal effect on shoreline erosion due to the predominantly cobble and boulder substrates in the tailrace areas. There has been minimal colonization of exposed shorelines by emergent plants within the 200 foot boundary area due to the inhospitable steep banks, rock outcrops and sand shoreline.

Layout and landscaping of the powerhouse grounds was designed in a manner to minimize visual impact and mitigate the project's impact on the surrounding shoreline. The powerhouse is a low profile structure only 20-25 feet above the dam crest and only 15 feet above the parking area. The parking area was screened from the river by trees, and disturbed sites were planted to native trees and shrubs. Areas of shoreline and steep banks, particularly those downstream from the dam were flagged and protected during construction.

As a condition of issuance, the FERC exemption requires compliance with any terms and conditions that the Federal or State fish and wildlife agencies have determined appropriate to prevent loss of, or damage to, fish and wildlife resources. There have been no deficiencies noted by any agency with jurisdiction for the DF plant.



Appendix 8

Description of Threatened and Endangered Species Protection

Ten species (six animal and four plant species), which occur in the DF facility watershed, are currently federally listed endangered species. In addition, seven animal and 38 plant species are listed by Vermont and 10 animal and 103 plant species by New Hampshire. No federally-listed threatened or endangered plant species are known to occur within the DF facility area.

As a condition of issuance, the FERC Exemption requires compliance with any terms and conditions that the Federal or State fish and wildlife agencies have determined appropriate to prevent loss of, or damage to, fish and wildlife resources. Based on commitments to comply with both state and

federal agency recommendations, the Vermont Agency of Environmental Conservation did not request the FERC to require a cumulative impact study for this facility. The DF facility operates within FERC and Federal or State Fish and Wildlife Agency guidelines. The project's exemption is subject to termination if the facility is found to be out of compliance. There have been no deficiencies noted by any agency with jurisdiction for the DF plant.

As mentioned in Appendix 7, the watershed area naturally protects fish and wildlife by its topography and lack of public access. Of the avian species currently listed on the Vermont and New Hampshire lists of threatened or endangered species, bald eagles have been spotted in the area but have no known nesting sites in the vicinity of DF.

As part of its application for re certification as a low impact hydropower facility, DFA contacted via email all of the relevant hydroelectric agencies it originally consulted with during the initial certification of the project in 2009. See Appendices 8.1. The agency was instructed via email that failure to respond would result in DFA submitting its application for re certification and indicate no comment from those agencies. No comments were received.

Appendix 9

Cultural Resources

A Request for Project Review was submitted on April 29, 2014 to the New Hampshire Division of Historical Resources for a list of known sites of historic or archaeological significance that occur within the DF Facility's project boundary. (see Appendix 9.1) Their response will be forwarded to LIHI upon receipt.

No known sites of historic or archeological importance were discovered during the FERC licensing process or the project review completed by the New Hampshire Division of Historical Resources during DFA's initial application for low impact certification of the DF facility in 2009.

An email request for Project Review was submitted on April 29, 2014 to the New Hampshire Division of Historical Resources and the United

States Advisory Council for Historic Preservation. (See Appendices 9.1-9.2) Both agencies were notified that failure to respond would be interpreted by DFA as no comment by the agency and would be included in DFA's application for re certification as such. No comments were received.

Appendix 10

Recreation

The DF facility is in Compliance with the recreational access, accommodation and facilities conditions in its FERC exemption. During the recreational season a boat restraint cable is installed in the vicinity of Marshall Island upstream of the DF dam. A canoe portage is provided on the New Hampshire side of the river. Boats traveling downstream are guided to the north end of the portage by signage maintained on Marshall Island (immediately upstream of the DF dam) (See Appendix 10.1). The portage leads downstream on the landward side of the DF powerhouse and rejoins the river approximately 100 feet below the powerhouse outlet.

Access to the portage also is provided from New Hampshire Road by means of a graveled road. DF maintains a sleeping platform adjacent to the portage approximately 400 feet north of the powerhouse (See Appendix 10.1). Both the Connecticut River Boating Guide and the Connecticut River Joint Commissions Recreation Executive Summary list the DF project recreational facilities, including mention of the canoe portage, sleeping platform and fishing access.

Access to the canoe portage, fishing area and sleeping platform are provided free of charge.

There have been no changes in the regulatory status of the DF project since 1993 nor have there been any agency comments noting deficiencies in DFA's compliance with the recreational conditions contained in the documents related to the FERC exemption and agency review of the project.

Please see Appendix 10-1 for photographs of the site and recreational

additions.

As part of its application for re certification as a low impact hydropower facility, DFA contacted via email all of the relevant hydroelectric agencies it originally consulted with during the initial certification of the project in 2009. See Appendices 10-2 – 10-3. Each of the agencies was instructed that failure to respond would result in DFA submitting its application for re certification and indicate no comment from those agencies. No responses were received.