

Low Impact Hydropower Institute  
Certification Administrator  
319 SW Washington Street, Suite 706  
Portland, Or 97204-2618

February 4, 2002

Dear Lydia:

Thank you for considering the Falls Creek Project for certification by the Low Impact Hydropower Institute. The Project is located in the Willamette National Forest, about 25 miles east of Sweet Home, Oregon, and utilizes run-of-the-stream for electricity generation. We are submitting our application questionnaire, supporting information, and some additional documentation to help you evaluate our project.

This project, completed in 1984 with an expected 100-year life, was issued the Oregon Governor's Energy Award in 1986 in recognition of the relatively large amount of power it produces with a low environmental impact. It was also praised by environmental author Marc Reisner, as a model project in the attached article written for "The Amicus Journal", which is a publication of the Natural Resource Defense Council, in its Spring 1985 issue.

The 4.3 MW project is low impact for many reasons. It uses very little water - about 26 CFS, with 2,381 feet of head - one of the highest heads in the United States. It is the water pressure rather than the water quantity that produces the power. There is no impact on recreation uses and the tailrace channel from the powerhouse to the river has been designed to look like a natural stream confluence. There is no impact on the fisheries resources from the project as only a small quantity of trout exist in pools below large natural falls. Sufficient water is released throughout the year to adequately maintain these pools. In addition the 7,380 foot penstock is completely buried in a narrow corridor through timbered Forest Service land and natural vegetation has been allowed to grow within the corridor. There is no visual impact from the penstock, nor any interference with the Forest Service's management of its timber resources, or other public uses of the forest. The only visible project features are a small water intake structure, and a powerhouse that has been bermed and landscaped to block it from view.

In addition to our application we have included a copy of the Governor's energy award, the Natural Resource Defense Council magazine article, and a video tape Frontier Technology produced that helps explain small hydro and features the studies and construction of the Falls Creek Project.

Please let us know if there is anything else we can send you to help you evaluate our project. We would welcome giving you or anyone in the Low Impact Hydro Institute a tour of our facility. The best time for the tour of the diversion would be late May or early June as the snow should be mostly gone by then.

Sincerely,

Ron Neet, CPE  
VP of Operations  
Frontier Technology, Inc.

# Description of Falls Creek Hydro

The Falls Creek Hydroelectric project was conceived by Gary Marcus, President of Frontier Technology, Inc., of Eugene in the early 1980's. Mr. Marcus wanted to build a renewable energy power plant that was environmentally friendly and would take advantage of the latest technologies in power generation.

The Falls Creek Hydroelectric project is a small electric power generating facility located near the South Santiam River, 25 miles east of Sweet Home, Oregon, in the Willamette National Forest. The Project uses an old technology in a new way. For centuries, people have used falling water to produce power. The Falls Creek Project was designed and built to have a 100-year life expectancy and little or no impact on the environment.

The Falls Creek Project differs significantly from the major hydroelectric facilities we rely on for electricity. Most of these facilities, like the Bonneville Dam system and Foster Reservoir, generate power from large quantities of water falling a relatively short distance – 100 to 400 feet. These are “Low to Medium Head” plants.

The Falls Creek Project generates power from a small quantity of water falling 2381 feet. This is a “High Head” plant, and has one of the highest “Head-Pressures” in the Northwest.

The Falls Creek Project is a run-of-river project, making use of available stream flow. A low diversion on Falls Creek diverts excess water from a 5-foot deep pool, into the penstock pipe. Most of this excess water comes from rainfall in the fall and winter and snow runoff in the spring. The amount of stream flow during these periods is frequently greater than 50 cubic feet per second (cfs), and occasionally exceeds 200 cfs. The Falls Creek Project draws about 26 cfs of this flow.

Between August and October, stream flow drops to less than one cfs. Because of the lack of excess water, the plant uses this time period for routine and preventative maintenance.

From the point where the water is diverted, Falls Creek continues to run 2.3 miles further to the South Santiam River. This section of the creek is very steep, containing no anadromous fish (salmon or steelhead). Along this stretch, only a few trout live in pools formed by falls. During operation of the project, sufficient water remains in Falls Creek beyond the diversion to maintain these pools.

Water is delivered through 7,380 feet of 30, 24, and 20-inch welded steel Penstock, dropping 2381 feet down the mountainside to the powerhouse on the south bank of the South Santiam River. The entire length of pipe is buried, with natural vegetation allowed to cover the route, thus concealing it from sight. The project is located on Forest Service land. The powerhouse is located directly across the river from a campground. It was designed to blend into the natural environment and not impact campground users. This was successfully accomplished by earth sheltering, sound control, and screening with native vegetation.

When the water reaches the powerhouse, it creates a pressure of approximately 1030 psi. The Turbine Generator rotates at 1200 RPM, and generates 4.9 Megawatts at full load. The plant output depends on the stream flow available for generation. The turbine spear valves are opened or closed to regulate flows to the turbine based on head level signals from the diversion that indicate the amount of water availability.

The power plant operates using a GE Fanuc 90-30 PLC control system with a head-end interface computer system called Lookout. The plant can be monitored, and re-started if necessary via remote control.

Power is generated at 4160 Volts, then transformed to 20,800 Volts for transmission via PacifiCorp's local distribution lines. Power is sold to PacifiCorp under a 35-year operating agreement.

Some recent photos are included to better understand the Falls Creek Hydro Project.

## **Falls Creek Hydroelectric Plant**

# FALLS CREEK HYDROELECTRIC PLANT

## **Falls Creek Diversion and Intake Structure**

## List of Enclosures

- Exhibit 1. 1986 Governor's Energy Award for the Falls Creek Hydro Project
- Exhibit 2. Natural Resource Defense Council magazine "The Amicus Journal" article by Environmental Author Marc Reisner.
- Exhibit 3. Falls Creek Hydro - application for FERC Exemption (in its entirety), including studies and agency findings/recommendations.
- Exhibit 4. FERC Exemption No. 6661 – Mar 4, 1983
- Exhibit 5. Oregon Water Resources Department License No. 410 – Mar 14, 1984
- Exhibit 6. Oregon Dept of Fish and Wildlife 1 cfs stream flow agreement – Nov 26, 1982
- Exhibit 7. U.S. Fish and Wildlife Letter concerning Environmental Impact – Aug 19, 1982
- Exhibit 8. Army Corp of Engineers 404/401 permits – Apr 22, 1983
- Exhibit 9. U.S. Forest Service Special Use permits – Mar 27, 1985
- Exhibit 10. Letter from ODFW verifying that 1 cfs flow is appropriately protective and that T & E species are in the facility area but not effected by our Facility – Jan 31, 2002.
- Exhibit 11. Letter from U.S. Forest Service verifying that 1 cfs flow is appropriately protective and that T & E species are in the facility area or downstream reaches, but not effected by the Facility – Jan 23, 2002.
- Exhibit 12. Letter from State of Oregon Department of Environmental Quality confirming compliance with quantitative water quality standards, and that Falls Creek is not a 303(d) listed stream, but South Santiam River is. – Jan 29, 2002.
- Exhibit 13. Falls Creek VHS Video – Full Circle, The Story of Small Hydro



# Low Impact Hydropower Institute

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## LOW IMPACT HYDROPOWER QUESTIONNAIRE As modified on November 28, 2001

[Excerpted from Part VI, Section E of the Low Impact Hydropower Certification Program. Words in italics are defined in Part VI, Section C, and line-by-line instructions are available in Section D. All documents are available on the Institute's web site]

### E. LOW IMPACT HYDROPOWER QUESTIONNAIRE

<b>Background Information</b>	
1) Name of the <i>Facility</i> .	Falls Creek Hydroelectric Project
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.	Application submitted by Ron Neet, VP of Operations, Frontier Technology, Inc. Facility owner is: Gary Marcus, President and General Partner, Falls Creek H.P. Limited Partnership. 1580 Valley River Dr., Suite 290, Eugene Or 97401 541-683-5200
3) Location of Facility by river and state.	20 miles east of Sweet Home, Oregon. Diverting stream is Falls Creek. Receiving river is South Santiam.
4) Installed capacity.	4.3 MW
5) Average annual generation.	14,900,000 kWh
6) Regulatory status.	FERC Exemption, Project #6661-004. Original FERC Order granting exemption was issued Mar 4, 1983. An Order amending the exemption was granted on Dec 14, 1984.
7) Reservoir volume and surface area measured at the high water mark in an average water year.	Diversion structure is 5.0 feet in height, 30 feet in length, and creates a pool area of .07 acres. Pool storage is negligible.
8) Area occupied by non-reservoir facilities (e.g., dam, penstocks, powerhouse).	In accordance with USDA Forest Service Special Use Permit #FSM 2714, The area occupied and permitted to occupy is 6.5 acres. The permit is issued for the purpose of operation and maintenance of the project's roads, diversion dam, penstock, powerhouse, self-contained toilet, antenna, and solar cells at the diversion.
9) Number of acres inundated by the Facility.	Approximately .25 acres. This is an area of about 80 feet wide by about 136 feet in length.

10) Number of acres contained in a 200-foot zone extending around entire impoundment.	Approximately 2.16 acres. Added 200 feet to the length and width to calculate sq ft, then divided by 43,560 to determine acreage.	
11) Please attach a list of contacts in the relevant Resource Agencies and in non-governmental organizations that have been involved in Recommending conditions for your Facility.	See attached list of recent contacts and FERC Application for exemption. It contains Resource Agency contacts.	
12) Please attach a description of the Facility, its mode of operation ( <i>i.e.</i> , peaking/run of river) and a map of the Facility.	See attached description. Maps are included in the FERC Application. Run-of-River as governed by rain run-off and snow load. Eight to nine months of operation, shutdown in summer months due to low stream flow.	
<p><b>Questions for For “New” Facilities Only:</b></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>	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?	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	
<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>	N/A	

<b>A. Flows</b>	<b>PASS</b>	<b>FAIL</b>
1) Is the Facility in <i>Compliance</i> with <i>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?	YES = Pass, Go to B N/A = Go to A2	NO = Fail
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?	YES = Pass, go to B NO = Go to A3	
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?	YES = Pass, go to B	NO = Fail
<b>B. Water Quality</b>	<b>PASS</b>	<b>FAIL</b>
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) <b>In Compliance</b> 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 is not a cause of that violation?	YES = Pass	NO = Fail
<b>C. Fish Passage and Protection</b>	<b>PASS</b>	<b>FAIL</b>
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

<p>2) 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 run is extinct)?</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>YES = Go to 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 present in the Facility area and/or downstream reach due in whole or part to the presence of the Facility?</p>	<p>NO = Go to C5 N/A = Go to C4</p>	<p>YES = Fail</p>
<p>4) If C3 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 4.a., has the Applicant demonstrated, and obtained a letter from the US 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?</p>	<p>YES = Go to C5</p>	<p>NO = Fail</p>

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
<b>D. Watershed Protection</b>	PASS	FAIL
1) Is the Facility in Compliance with Resource Agency Recommendations, or, if none, with license conditions, regarding protection, mitigation or enhancement of lands inundated by the Facility or otherwise occupied by the Facility, and regarding other watershed protection, mitigation and enhancement activities?	YES and N/A = Pass	NO = Fail
<b>E. Threatened and Endangered Species Protection</b>	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 authority 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 authority pursuant to similar state procedures; is the Facility in Compliance with conditions pursuant to that authority?	YES = Go to E4 N/A = Go to E5	NO = Fail
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	YES = Pass, go to F	NO = Fail

d) The recovery plan under active development will have no material effect on the Facility's operations?		
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
<b>F. Cultural Resource Protection</b>	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
<b>G. Recreation</b>	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
<b>H. Facilities Recommended for Removal</b>	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

## Questionnaire Supporting Information For Falls Creek Hydro

### Background Information

#### 11. List of Contacts for Falls Creek Hydro

	<u>Name/Title</u>	<u>Organization</u>	<u>Phone No.</u>
a.	Jim Fuller (Falls Creek Design Engineer)	Fuller & Morris Engineering	1-541 265 4203
b.	Wayne Hunt (Biologist)	Oregon Dept of Fish and Wildlife	1-503 373 7927 ext. 26
c.	Michael Rassbach (District Ranger)	US Forest Service Sweet Home Ranger District	1-541 367 9232
d.	Todd Buchholz (District Fisheries Biologist)	US Forest Service Sweet Home Ranger District	1-541 367 5168
e.	Lupe Wilson (Forestry Tech)	US Forest Service Sweet Home Ranger District	1-541 367 9232
f.	Kip Pheil (Engineering Analyst)	Oregon Office of Energy	1-503 378 4442
g.	Karl Swanson, P.E. (Civil Engineer)	Federal Energy Regulatory Commission	1-503 944 6734
h.	Dennis Belsky	Oregon Department of Environmental Quality (DEQ)	1-541 776 6010 ext. 226
i.	Suzanne Wallace (School Teacher)	Lebanon School District	1-541 451 8521 Home# 1-541 466-5849

## A. Flows

- A.1. **N/A** – because our exemption was issued prior to 12/31/86
- A.2. **NO** – The natural physical characteristics of Falls Creek are not able to meet the requirements of the Montana-Tennant methodology. Under the method, Falls Creek’s unimpaired annual average would be 15.4 CFS. Our instream flow bypass releases, on a daily basis, would have to be :
- Oct-Mar: 3 CFS (20% of average annual flow)
  - Apr-Sept: 6 CFS (40% of average annual flow)

As the Apr-Sept flow rate calculation is far above the natural stream flow, we are not able to answer yes to A.2. Falls Creek flows are dependant on the amount and duration of rain run-off and snow packs. Winter Flows can typically peak over 50 CFS during storms, with a Dec-May average of 23.5 CFS. The natural uninterrupted stream flow occurs roughly 4 months out of the year, July through October, when natural flows are frequently at ½ CFS and not sufficient to operate the hydro. The hydro requires a minimum of about 3 CFS to operate. In addition to the 4 months when the hydro is off-line, there is an average of 60 days a year when the stream flow exceeds the requirements of the hydro, and spills over the top of the intake structure into the stream bed.

- A.3. **YES** - We have demonstrated and have obtained letters from the Oregon Dept of Fish and Wildlife (Encl #10) and the US Forest Service (Encl #11), confirming that the flow conditions at our Facility are appropriately protective of fish, wildlife, and water quality. The letters are included for reference.

## B. Water Quality

- B.1.a **N/A** – because our 401 was issued prior to 1986
- B.1.b. **YES** - We are 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. Section 2 of our FERC application for exemption, beginning on pages E-5, discusses in detail the issues surrounding our negligible impact on the water quality. The physical characteristics of the diversion structure guarantees that the minimum amount (1 CFS) of water will bypass at all times.

We have included a copy of our State of Oregon Water Resources License HE 410 and a recent letter from The Oregon Department of Environmental Quality that confirms that we are in compliance with the water quality standards.



- B.2. **YES** – The South Santiam River is on the Clean Water Act 303(d) list for exceeding temperature criteria. There is no listing for Falls Creek, a tributary of the South Santiam River in the Willamette Basin on the 303(d) lists.
- B.3. **YES** – The determination has been made that the Falls Creek Facility IS NOT the cause of that violation in the South Santiam River. Enclosed is a recent letter (Exhibit 12) from the Oregon Dept of Environmental Quality that confirms our compliance.

### C. Fish Passage

- C.1. **N/A** – Our exemption was issued prior to 1986
- C.2. **NO** – there are no historic records of anadromous or catadromous fish here because they are blocked by natural barriers (falls) downstream of the Intake structure. Falls Creek drops about 2000 ft in elevation within a 2-mile stretch of stream bed, consisting of many falls. The natural falls prevent the passage of fish. The only fish that have been found to exist in the upstream or downstream reaches are trout, and they live in the pools created from the falls and natural barriers. The Falls Creek diversion dam was constructed with a bypass so that a minimum 1 CFS flow would occur at all times and serves to feed these trout pools.  
  
Enclosed is a copy of our FERC application and exemption. The environmental studies are included as part.
- C.3. **NO** – resource agencies have had the opportunity to issue fish passage prescription, but they haven't, and its not for any of the reasons listed.
- C.3.c It's because they are prevented from reaching the area due to the natural barriers.
- C.5. **N/A** – no fish passage prescriptions for riverine fish has been issued.
- C.6. **YES** – the only recommendation that has been offered by Resource Agencies was during initial construction. The US F&W and the ODFW recommended that a screen be installed in the tailrace to prevent fish from trying to swim into tailrace pipe. No other recommendations were issued for protection of fish.

### D. Watershed Protection

- D.1. **N/A** – There are no agency recommendations or FERC conditions addressing watershed protection or inundated lands.

Enclosed is a copy of our FERC application and exemption. The environmental studies are included as part.

## E. Threatened and Endangered Species

- E.1. **YES** – According to the Oregon Dept of Fish and Wildlife and the US Forest Service, Winter Steelhead and Spring Chinook are on the T&E list and are present in the South Santiam river and the lower 0.1 mile of Falls Creek at the confluence of the South Santiam River. Also, the federally listed Northern Spotted Owl is also present in the project area. None of these species are effected by the Facility.

Enclosed is a copy of our FERC application and exemption. Also enclosed are letters from the ODFW and the USFS that verifies that our Facility has “NO NEGATIVE IMPACT” on any of the listed species.

- E.2. **N/A** – There are no Endangered Species recovery plans that are relevant to our facility, as our facility has no impact on the Winter Steelhead.
- E.3. **N/A** – We have not received authority to incidentally *take* a species. This does not apply to our facility.
- E.5. **YES** – We have demonstrated, and the Resource agencies concur that our Facility and Facility operations does not negatively impact the Winter Steelhead or Spring Chinook, in the South Santiam River. Also, our Facility does not negatively impact the Northern Spotted Owl. At the confluence of our tailrace and the river, fish screens are in place to prevent fish from trying to swim up the tailrace channel.

Enclosed is a letter from the US Fish and Wildlife, exhibit #7, which lists mitigation measures that have been recommended by the USF&W and implemented by our Facility. Also enclosed are two recent letters, one from the Oregon Dept of Fish and Wildlife and the other from the Fish and Wildlife section of the US Forest Service that verifies’ that our Facility has no impact on the Winter Steelhead, the Spring Chinook, or the Northern Spotted Owl.

## F. Cultural Resources

- F.1. **YES** – We are in compliance with all requirements included in our FERC exemption. There are not any specific requirements regarding cultural resource protection included in our exemption.

## G. Recreation

- G.1. **YES** – no specific recreation requirements exist in our FERC exemption, and we are in compliance with our exemption. Our FERC exemption is included.
- G.3. **YES** – access is provided to the upstream and downstream area without fees or charges. (It is all National Forest land)

## H. Facilities Recommended for Removal

- H.1. **NO** – No resource agency has recommended removal of the diversion, or any other facilities.

## Sworn Statement and Waiver of Liability

All statements, information, and supporting material submitted to the Low Impact Hydropower Institute as part of this Application package are true and complete to the best of our knowledge.

### Waiver of Liability

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.

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Gary Marcus  
President  
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