

# Memorandum

**To:** Michael Sale, Executive Director, LIHI  
**From:** Jeffrey Cueto, P.E.  
**Date:** January 27, 2016  
**Re:** Siphon Power Hydroelectric Project – LIHI Certificate #73  
Recertification Request

This memorandum contains my recommendation for recertification of the Siphon Power Hydroelectric Project (Project), located south of Bend, Oregon off the Deschutes River, a major tributary of the Columbia River. It is owned by the Central Oregon Irrigation District (COID). The Project utilizes water from the Central Oregon Irrigation Canal when water is available in excess of irrigation demands; it discharges directly to the Deschutes River. FERC granted the Project a 50-year license in 1987 (FERC Project No. 3571).

LIHI publicly noticed the application for recertification on November 2, 2015, with comments due by December 30, 2015; no comments were received.

I did the original review for certification of the Project in 2011, recommending that the facility be certified for a period of five years. By letter dated May 28, 2011, LIHI notified COID that it had granted certification effective October 28, 2010; no special conditions were imposed. By letter dated June 19, 2015, LIHI extended the term to December 31, 2015.

## **I. Recertification Standards.**

Sections 2.5, 2.24 and 2.25 of LIHI's Certification Handbook (Updated April 2014) address the process for recertification applications. The first step in the process, after receipt of an application and assignment to an Application Reviewer, provides for an intake review by the Application Reviewer to make an initial determination as to whether there has been either 1) a material change at the facility that would affect the certification or 2) a material revision in the LIHI criteria subsequent to the original certification action. With a determination of no material change, renewal of the certification is granted. Should a determination be made that there has been a material change, the application becomes subject to a full review following a process similar to the initial application.

## **II. No further application review is recommended.**

In support of its application for recertification, COID filed an updated Questionnaire using the current April 2014 version, the original application's exhibits and attachments, and a copy of the City of Bend Water Overlay Zone regulations (Exhibit D-1). I reviewed the Questionnaire and the 2011 reviewer report. Aside from the updated Questionnaire, COID filed no new information from any resource agency, nor documentation related to current water quality conditions. At my request, COID revised the Questionnaire to include an updated resource agency contact list (LIHI\_QUESTIONNAIRE 2015 COID Rev 1.25.16.docx). I also reviewed files contained in FERC eLibrary subsequent to the last recertification review, as well as the annual LIHI compliance statements<sup>1</sup>, in order to determine what project changes have occurred, if any, and what the recent compliance track record has been. None of the available information indicates that any material changes have occurred since the Project was first certified. By email dated January 25, 2016 (attached), COID confirmed this determination. Further, no environmental or public recreational use accommodation violations were found in the record.

Based on available information and my understanding that no relevant material changes in the LIHI criteria, or criteria interpretations, have been made since the certification review in 2011, I concluded that it is not necessary to directly solicit input from resource agencies and license process stakeholders. In my opinion, the aforementioned materials are sufficient to support a conclusion that a recertification decision can be made based on this Intake Review, that a Full Review is unwarranted, and that recertification should be granted for a five-year term.

## **III. There have been no “material changes” at the facility that would affect the certification.**

With respect to material changes at the facility, I reviewed the record for instances of non-compliance related to the federal license and/or new or renewed issues of concern that are relevant to LIHI's criteria. I find that there are neither instances of significant non-compliance nor new or renewed issues of concern. The Project is not subject to a water quality certification, as the State waived jurisdiction.

### **Flows and Fish Passage**

Under a 1987 agreement, COID maintains a year-round conservation flow of 400 cfs in the bypassed reach and makes annual payments to the Oregon Department of Fish and Wildlife for a mitigation and enhancement fund intended to compensate for lost habitat. Under the agreement, a payment schedule of 32 payments graduated from \$45,000 to \$95,000 is set, with subsequent payments negotiated before January 1, 2021 with a floor of \$95,000.

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<sup>1</sup> Compliance statements cover the period from October 28, 2010 through July 28, 2015.

COID files quarterly flow compliance reports with ODFW and FERC, addressing both the bypass conservation flow, which is gaged, and observations of fish mortality/injury in the tailrace area<sup>2</sup>. FERC eLibrary contained 2<sup>nd</sup> quarter reports for 2012, 2013, and 2015 and 3<sup>rd</sup> quarter reports for 2014 and 2015. COID provided reports for the 1<sup>st</sup> and 4<sup>th</sup> quarter 2015 at my request. All of the available reports indicated compliance. No fish damage was noted in the tailrace observations. As noted in the 2011 reviewer report, the irrigation water use is not subject to the conservation flow requirement; flows metered in the bypass fell below 400 cfs in mid-November 2015, but the hydroelectric plant was not being operated at that time according to COID.

### **Water Quality**

As noted in the 2011 reviewer report, the Deschutes River in the vicinity of the Project is Section 303(d) listed as having several use impairments, but the Oregon Department of Environmental Quality (ODEQ) did not attribute the impairments, in part or in whole, to the Project. At that time, ODEQ supported LIHI certification based on data that was collected in 2001 when more than half the river flow was being diverted into the canal. In November 2014, ODEQ filed its 2012 303(d) list with EPA for approval, which remains pending.<sup>3</sup> Based on a cursory examination of the 2012 list, I did not note any proposed changes in status.

### **Threatened and Endangered Species**

Although the Questionnaire response continues to note bald eagle as a federally listed species, it was delisted prior to the original application. COID's email of January 25, 2016, indicates that the Oregon spotted frog (*Rana pretiosa*) is now listed but at this time has not been identified as being present in the Project's area. The frog has threatened status. The current endangered species list for Oregon can be found on the U.S. Fish and Wildlife Service website at:

<http://www.fws.gov/oregonfwo/Documents/OregonSpeciesStateList.pdf>

### **Watershed Protection**

Based on the Questionnaire, COID suggests that the Project qualifies for an additional three years under Criterion D.1 by providing "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." In support, COID provided a copy of the City of Bend Water Overlay Zone regulations, which place special restrictions on development within the river corridors of the Deschutes and Tumalo rivers, especially as related to the protection of vegetation.

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<sup>2</sup> COID initially had screened fish from the tailrace area, but removed the screens after consultation with the Department of Fish and Wildlife and agreement that the area would be monitored for fish damage.

<sup>3</sup> <http://www.deq.state.or.us/wq/assessment/assessment.htm>

COID did not follow the Handbook instructions by providing “a map that depicts its [buffer zone] location at a sufficiently detailed scale and shows the vegetative condition and any designated recreational uses within the buffer zone.” Regardless, the Project does not have a shoreline *per se*. There is no reservoir or even a riverine impoundment. Further investigation does not seem warranted, such as determining the extent of private versus municipal or COID ownership, actual setbacks relative to the 200-foot requirement, vegetative condition, and extent of conservation achieved. Based on my understanding of the criterion, I do not believe the Project qualifies.

## **Recreation**

A document in FERC eLibrary indicated that a public safety event occurred in 2012. According to the document, the canal intake area is occasionally used by kayakers and rafters as an emergency take-out, and emergency management personnel had to help a kayaker off the trashrack. This section of the Deschutes River is heavily used by recreationalists for its Class IV rapids. The document noted that the intake has warning signage and ladders to help boaters exit in an emergency. COID followed up by modifying the intake to reduce the risk, and reported to FERC on July 17, 2015 that the work had been completed.

## **Compliance**

FERC eLibrary did not contain any documentation of significant environmental issues having been raised over the last five years.

## **IV. LIHI’s certification criteria have not been revised since the completion of the last certification review in 2007.**

LIHI is in the process of revising its certification criteria and publishing a new Handbook, but the transition to the new certification processes will not be implemented until later in 2016. Facilities for which recertification applications have been filed on or before December 31, 2015, are evaluated using the April 2014 version of LIHI's Certification Handbook.

It is my understanding that LIHI’s criteria, or the Board’s interpretation of one or more criterion, that are applicable to the circumstances the Project have not changed in meaningful ways since the completion of the original certification review in May 2011.

## **V. Conclusion.**

In light of the above, I recommend recertification of the Siphon Power Hydroelectric Project for an additional five years subject to two special conditions:

1. That the Owner include with its annual LIHI compliance statements copies of the reports that are filed with the Oregon Department of Fish and Wildlife as related to conservation flows and tailrace fish observations, covering the prior four quarters.

2. That the Owner provide with its 2020 LIHI compliance statement documentation of its agreement with the Oregon Department of Fish and Wildlife as concerns the level for mitigation and enhancement funding for fish and wildlife beginning with January 1, 2021.

**From:** JoshuaPeed [<mailto:jpeed@coid.org>]  
**Sent:** Wednesday, January 27, 2016 12:00 PM  
**To:** Jeffrey Cueto  
**Cc:** JennyHartzellHill; Mike Sale  
**Subject:** RE: Siphon Power Hydro Project - LIHI application

Jeffrey,

You are correct, as there was no generation in November the low flows in November were associated with an irrigation stock-run.

Thank you,

Joshua Peed

**From:** Jeffrey Cueto [<mailto:ompompanoo@aol.com>]  
**Sent:** Wednesday, January 27, 2016 8:54 AM  
**To:** JoshuaPeed <[jpeed@coid.org](mailto:jpeed@coid.org)>  
**Cc:** JennyHartzellHill <[jenny@coid.org](mailto:jenny@coid.org)>; Mike Sale <[mjsale@lowimpacthydro.org](mailto:mjsale@lowimpacthydro.org)>  
**Subject:** Re: Siphon Power Hydro Project - LIHI application

Thanks, Joshua. I assume the drop in conservation flows below 400 cfs in mid-November related to irrigation water use since your plant wasn't operating.

I'll be sending LIHI my review and recommendations later today. I don't expect that there will be any problems with recertification.

I appreciate the quick response.

Jeff

On Jan 27, 2016, at 11:42 AM, JoshuaPeed <[jpeed@coid.org](mailto:jpeed@coid.org)> wrote:

Jeffrey,

Attached are the Siphon Flow Reports for the 1<sup>st</sup> and 4<sup>th</sup> quarters of 2015.

Please let Jenny or I know if you need anything else.

Do you have any idea when the review of our LIHI application will be finalized?

Thank you,

Joshua Peed

**From:** Jeffrey Cueto [<mailto:ompompanoo@aol.com>]  
**Sent:** Tuesday, January 26, 2016 8:34 AM  
**To:** JennyHartzellHill <[Jenny@coid.org](mailto:Jenny@coid.org)>  
**Cc:** JoshuaPeed <[Jpeed@coid.org](mailto:Jpeed@coid.org)>  
**Subject:** RE: Siphon Power Hydro Project - LIHI application

Thanks, Jenny.

If you wouldn't mind, could you send me the bypass flow/tailrace screening reports for 2015, 1<sup>st</sup> and 4<sup>th</sup> quarters? Several quarterly reports from the last five years are available in FERC's eLibrary, but most are not. If I can get the two reports, that should suffice for my purposes.

Jeff

**From:** JennyHartzellHill [<mailto:Jenny@coid.org>]  
**Sent:** Monday, January 25, 2016 4:10 PM  
**To:** [ompompanoo@aol.com](mailto:ompompanoo@aol.com)  
**Cc:** JoshuaPeed  
**Subject:** FW: Siphon Power Hydro Project - LIHI application

Hi Jeff,

Attached please find a revised LIHI Questionnaire with the updated names, addresses and last date of contact regarding the SPP Hydroelectric Project as you requested.

If you have any questions or need additional information, please let us know.

Thank you,

Jenny Hartzell-Hill

Administrative Assistant

Central Oregon Irrigation District

1055 SW Lake Court

Redmond OR 97756

Phone: 541-548-6047

Direct Line: 541-504-7582

Fax: 541-548-0243

**From:** JoshuaPeed [mailto:jpeed@coid.org]  
**Sent:** Monday, January 25, 2016 1:07 PM  
**To:** Jeffrey Cueto  
**Cc:** CraigHorrell; JennyHartzellHill  
**Subject:** RE: Siphon Power Hydro Project - LIHI application

Jeffrey,

Jenny and I are working on getting back to you regarding our LIHI application, we should have everything back to you by tomorrow.

Regarding the two highlighted questions below:

Your sentence, "I believe your recent application contains an update of the LIHI Questionnaire, dated April 2014 on the first page, and a copy of the original application as well as a new Exhibit D-1, which is the Bend zoning code related to the Water Overlay Zone.", **does constitute all of the new information between our 2010 application and our current application.**

There are no changes to the project since our 2010 application. I'm not sure why we would have included the Bald Eagle listing even back in 2010 but since 2010 the Oregon Spotted Frog has been listed but at this time has not been identified as being present within the project's reach.

Thank you,

**Joshua Peed**

Hydro Electric Operations Manager

Central Oregon Irrigation District, Hydro Dept.

61535 Brookwood Blvd.

Bend, OR 97702

(541) 647-2330 Office

(541) 350-3781 Cell





**From:** Jeffrey Cueto [<mailto:ompompanoo@aol.com>]  
**Sent:** Monday, January 25, 2016 8:02 AM  
**To:** JoshuaPeed <[jpeed@coid.org](mailto:jpeed@coid.org)>  
**Subject:** FW: Siphon Power Hydro Project - LIHI application

FYI

**From:** Jeffrey Cueto [<mailto:ompompanoo@aol.com>]  
**Sent:** Monday, January 25, 2016 10:42 AM  
**To:** 'chorrell@coid.org'  
**Subject:** RE: Siphon Power Hydro Project - LIHI application

If it helps, I am attaching a 2010 version of the Questionnaire that has a list of contact persons. There seem to be a few versions of the Questionnaire floating around. If you have any questions, feel free to call me or respond to this message.

**From:** Jeffrey Cueto [<mailto:ompompanoo@aol.com>]  
**Sent:** Monday, January 25, 2016 8:44 AM  
**To:** 'chorrell@coid.org'  
**Subject:** RE: Siphon Power Hydro Project - LIHI application  
**Importance:** High

Hi. If you wouldn't mind, could you confirm receipt of the message below and give me an idea of when you might be able to respond? If the contact information might take awhile to pull together, I would at least like responses to the two highlighted questions reasonably soon.

Thanks.

Jeff Cueto

**From:** Jeffrey Cueto [<mailto:ompompanoo@aol.com>]  
**Sent:** Thursday, January 21, 2016 2:23 PM  
**To:** 'chorrell@coid.org'  
**Cc:** 'Mike Sale'  
**Subject:** Siphon Power Hydro Project - LIHI application

Mr. Horrell – LIHI has asked me to review your application for recertification. I had done the original certification review back in 2011.

I believe your recent application contains an update of the LIHI Questionnaire, dated April 2014 on the first page, and a copy of the original application as well as a new Exhibit D-1, which is the Bend zoning code related to the Water Overlay Zone. Please let me know whether this constitutes all of the new information relative to the 2010 application.

Regarding Resource Agency and NGO contacts (Questionnaire #11), please follow these instructions (your application just lists agency names):

*Those 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.***

A key to my review is the determination as to whether any material changes have occurred at the Project. The Water Overlay Zone would be something new relative to my original review. **Are there any other changes at the project, including environmental conditions, of which I should be aware?** Some of the information, originating from the project licensing, is a bit dated, such as the Threatened and Endangered listings. Bald eagles are no longer federally listed, delisted in 2007.

Thanks for your cooperation.

><{{{ }> **Jeffrey R. Cueto, P.E.**

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