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UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

PacifiCorp Electric Operations )  
 )  
Application for New License ) Project No. 2643-001  
 ) (Bend Hydroelectric Project)  
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AMERICAN RIVERS, THE PACIFIC RIVERS COUNCIL (FORMERLY THE OREGON RIVERS COUNCIL), AND OREGON TROUT'S COMMENTS, RECOMMENDATIONS, TERMS AND CONDITIONS ON THE BEND HYDROELECTRIC RELICENSING APPLICATION

American Rivers, The Pacific Rivers Council (formerly The Oregon Rivers Council) and Oregon Trout (Conservation Intervenors) hereby submit their comments and recommendations pursuant to section 10(a) of the Federal Power Act (FPA), 16 U.S.C. § 803 (a), as amended, on the application of PacifiCorp Electric Operations (PP&L or the Applicant) to relicense the Bend Hydroelectric Project.

I. Introduction: Background of the Bend Project

The Bend Hydroelectric Project was constructed in 1913 at River Mile (RM) 166 on the Deschutes River within the City of Bend, Deschutes County, Oregon. The project's 14-foot high, 252 foot-long dam impounds the 40-acre Mirror Pond Reservoir. The powerhouse contains three turbine generator units with a total installed capacity of 1.1 megawatts; however, the project generates only approximately .60 average megawatts annually.

Prior to dam construction, trout populations were abundant in

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the upper Deschutes River. These fish migrated freely through the upper Deschutes River to reach spawning grounds in the upper mainstem and tributaries. Today, however, rainbow and brown trout have declined significantly from their former numbers in the upper Deschutes, both below and above the Bend Project. While there are many reasons for this decline, the Oregon Department of Fish and Wildlife (ODFW) has found -- and PP&L admits -- that the Bend Project has contributed significantly to it.

Recreational use of the Deschutes River also has been impaired by the Bend Project. There is limited recreational access to the river in the area of the Project, and reduced flows in the Project bypass reach limit recreational opportunities.

The Bend project license, which has controlled project operations since 1965, however, contains no conditions for fish passage, fish protection devices, such as a tailrace barrier, or minimum instream flow requirements for the bypass reach of the project to support fish spawning, rearing, and migration; nor have recreational flows ever been set for the bypass reach. What is worse, the Applicant has offered essentially to do nothing to improve conditions for migratory fish or recreationists, despite the fact that it has had free use of the river for decades and is asking for license to use it for yet another 30 to 50 years for private gain.

## II. Comments and Recommendations

### A. The Commission's National Environmental Policy Act Obligations.

We submit that the Commission should have completed the environmental review required by the National Environmental Policy Act (NEPA)<sup>1</sup> prior to calling for comments, recommendations and prescriptions pursuant to sections 10 and 18 of the FPA.

Because the Commission has not done so, however, it must provide another formal period, with notice, for comments, recommendations and prescriptions after making public the results of its environmental review. It is our view that if it does not do so, it will have violated the FPA and NEPA. The public comment provisions of the FPA read together with those of NEPA would otherwise have no meaning.

It is because NEPA review has not been completed and made available that Conservation Intervenors are forced to make comments and recommendations in the alternative or are not able to comment more specifically in some instances. So, for instance, neither the Applicant nor the Commission has studied, or at least made available the results of any such study, the appropriate instream for the bypass reach of the project to support recreational boating.

Thus, we reserve the right to revise our comments and recommendations until after such time as the Commission has

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<sup>1</sup> 42 U.S.C. § 4321 et seq.

completed its environmental review of project and operational alternatives.

In a motion filed with the Commission today, Conservation Intervenors have formally requested the Commission to prepare a draft environmental impact statement for this project. We will not repeat the content of that motion here.

B. The Commission's Fish and Wildlife Obligations.

Federal statutes require the Commission to give heightened consideration to fish passage issues in the licensing of hydroelectric projects.

The Electric Consumers Protection Act of 1986 (ECPA), which amended the Federal Power Act (FPA), directs the Commission "to adequately and equitably protect, mitigate damages to, and enhance fish and wildlife (including related spawning grounds and habitat) affected by the . . . operation and management of the project."<sup>2</sup> Before it can issue a license, the Commission must find that the project in question is "best adapted to a comprehensive plan" for the waterway, including protection, mitigation and enhancement of fishery resources<sup>3</sup>, and give "equal consideration" to such protection.<sup>4</sup>

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<sup>2</sup> 16 U.S.C. § 803(j)(1).

<sup>3</sup> 16 U.S.C. § 803(a).

<sup>4</sup> 16 U.S.C. § 797(e). The Fish and Wildlife Coordination Act, 16 U.S.C. § 662, also requires that all federal agencies give "equal consideration" to fish and wildlife conservation values in water resource development programs.

The FPA also contains specific provisions for fishways for upstream and downstream passage of fish. The Commission is directed to include as mandatory conditions in licenses, "such fishways" as may be prescribed by the federal fishery agencies, including the U.S. Fish and Wildlife Service (USFWS).<sup>5</sup>

In addition, in Confederated Tribes and Bands of the Yakima Indian Nation v. Federation Energy Regulatory Commission, 746 F.2d 466, 476 (9th Cir. 1984), the Court of Appeals for the Ninth Circuit held that the decision to relicense a dam is to be evaluated by the Commission as if it were a new license application, "including a consideration of all relevant harms and benefits to public uses related to the project."

The Court also noted that the Pacific Northwest Electric Power Planning and Conservation Act (NWPAA) supplements the Commission's duties under the Federal Power Act. It directs the Commission to "protect, mitigate, and enhance fish and wildlife, including related spawning grounds and habitat, affected by . . . projects or facilities in a manner that provides equitable treatment for . . . fish and wildlife."<sup>6</sup> Equitable treatment, the Court said, obligates the Commission to place fish and wildlife concerns on an

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<sup>5</sup> 16 U.S.C. § 811

<sup>6</sup> 16 U.S.C. § 839(h)(11)(A)(i).

equal footing with power production.<sup>7</sup>

The Commission must, for instance, among many other things, determine whether the .6 Mwa proposed to be generated at the Bend project could be recaptured in a conservation program rather than be generated at the expense of the Deschutes river fishery. This is because the Federal Power Act now instructs that the Commission:

shall consider . . . the electricity consumption efficiency improvement program of the applicant, including its plans, performance and capabilities for encouraging or assisting its customers to conserve electricity cost-effectively . . . .<sup>8</sup>

Finally, if the Commission determines to issue a new license, it "shall include conditions for . . . protection, mitigation and enhancement" of fish and wildlife affected by the project.<sup>9</sup> This means, as we have said elsewhere, that the Applicant's proposal to continue to grind up the 40,000 or so fish that pass through its project each year,<sup>10</sup> and to continue to block passage to upstream spawning and rearing grounds necessary to the restoration of the fishery, cannot prevail.

Before construction of the Bend Project, native trout existed

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<sup>7</sup> Confederated Tribes and Bands of the Yakima Indian Nation v. FERC, 746 F.2d 466, 473 (9th Cir. 1984). See also, e.g., National Wildlife Federation v. FERC, 801 F.2d 1505, 1515 (9th Cir. 1986).

<sup>8</sup> 16 U.S.C. § 803(a)(2)(C).

<sup>9</sup> 16 U.S.C. § 803(j)(1).

<sup>10</sup> Letter of April 24, 1992, from Dean L. Shumway, Director, Division of Project Review, to Mr. Stanley A. deSousa, Director, Hydro Resources, PacifiCorp, at Schedule A, p. 1, item 6.

in abundance in the upper Deschutes River Basin and, under historic flow conditions, migrated through the upper Deschutes to reach spawning grounds in the upper mainstem and tributaries. These fish have been damaged by the construction and operation of the Bend Project: upstream migrating trout are killed when they continually strike the face of the dam, and downstream migrants are killed when they enter the turbines.<sup>11</sup> Moreover, the Bend Project, among others on the Deschutes River, isolates the fish into population fragments, resulting in a long-term loss in genetic diversity.<sup>12</sup>

To restore fish population and habitat in the basin, ODFW has implemented the Deschutes River Mitigation and Enhancement Program. As a result of the ODFW program, USFWS also expects the numbers of wild trout to increase in the upper Deschutes River. This plan, as more fully explained in the comments and recommendations of ODFW, is comprehensive plan for purpose of the Federal Power Act, with which the Commission must act consistently.

Perhaps most important, on October 27, 1992, several petitioners formally requested the USFWS for an emergency listing of bull trout under the Endangered Species Act.<sup>13</sup> Bull trout were

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<sup>11</sup> Application for Subsequent License for Minor Water Power Project, Bend Hydroelectric Project, FERC Project No. 2463 (December 1991) (hereinafter "Application") at Exhibit E, p. 3-18; Letter from Richard Kruger, Oregon Department of Fish and Wildlife, to Lois Cashell, Federal Energy Regulatory Commission, (hereinafter "Kruger Letter") at 5 (February 28, 1992).

<sup>12</sup> Kruger Letter at 4.

<sup>13</sup> See Attachment A hereto.

historically distributed throughout the mainstem Deschutes river. Because of passage barriers and decreased instream flows, among other things, however, these fish appear to be on the brink of extinction.

The Bend project blocks passage to some 95 miles of upstream habitat in the former range of these fish.<sup>14</sup> Removal of this and other barriers to passage and the concomitant protection of migrants from turbine death and damage in their downstream migration through the Bend project will no doubt be necessary to any recovery of the bull trout in the Deschutes river.<sup>15</sup>

Because the 90 day time period (to the maximum extent practicable) for the USFWS determination of whether to propose listing bull trout has expired,<sup>16</sup> it will be necessary for the Commission to "confer with the Secretary on any agency action which is likely to jeopardize the continued existence of any species

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<sup>14</sup> See more detailed discussion of the status, former range, current status, and necessary recovery steps for bull trout in the Comments, Recommendations, Terms and Conditions of the Oregon Department of Fish and Wildlife, dated February 4, 1993.

<sup>15</sup> See Comments, Recommendations, Terms and Conditions of ODFW, dated February 4, 1993, in this proceeding.

<sup>16</sup> See 16 U.S.C. § 1533(b)(3)(A):

To the maximum extent practicable, within 90 days after receiving the petition of an interested person under section 553(e) of title 5, to add a species to . . . either of the lists . . . the Secretary shall make a finding as to whether the petition presents substantial scientific or commercial information indicating that the petitioned action may be warranted.

proposed to be listed<sup>17</sup> prior to making any determination on the relicensing of the Bend project.

1. Fish Passage

Therefore, if the Commission determines to issue a license, it must contain terms and conditions which require the construction of upstream passage devices and bypass screening to protect downstream migrants. Approach velocities for downstream bypass screens should protect all life stages of migrating fishes. Functional designs for upstream passage devices and downstream bypass screens should be submitted to the fish and wildlife agencies, with notice to all intervenors, within 6 months from the date of issuance of any license and/or 90 days prior to any construction or ground disturbing activities, which occurs first. The license should require that fish passage devices must be operational within 3 months of their approval by the fish and wildlife agencies.

2. Other Fish Protection Devices

The Commission should also include as a condition of the license that the Applicant design and construct a tailrace barrier, under the same terms and conditions as noted above for fish passage facilities.

3. Other Issues Relevant to Restoration of the Fishery

a. Minimum Instream Flows for the Fishery.

The general provisions of ECPA and the FPA which underscore

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<sup>17</sup> 16 U.S.C. § 1536 (a)(4).

the need for fish passage facilities also support the related need for improved flows for spawning, rearing, and migration of fish. To address the requirements of the FPA and ECPA, PP&L proposes a "target" flow in the bypass reach of the project of 100 cubic feet per second (cfs) in the bypass reach of the project. Leaving aside for a moment the adequacy of the proposed flow level, such a "target flow" is virtually unenforceable, especially in the absence of any plan to monitor the bypassed reach for compliance with any flow regime. Accordingly, we recommend that the flows specified for the bypassed reach must be minimum flows, and that PP&L must be required to monitor such flows in the bypassed reach.

Moreover, the Applicant's responses to study requests reveal that with gravel enhancement in the bypass reach as recommended by the resource agencies, spawning habitat is optimized at 365 cfs in the bypass reach; adult habitat at 200 cfs, and juveniles at approximately 125 cfs. At 365 cfs, adult habitat is still approximately 97% of its maximum, however.<sup>18</sup>

In ODFW's view, adults are the most important life stage to be managed in the project bypass reach; moreover, ODFW points out, fish biologists hold the professional opinion that a larger amount of habitat is required to support adult life stages than younger life stages.

Therefore, because habitat for adults and spawners is clearly

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<sup>18</sup> Figures 7-1 through 7-4 in Applicant's October 21, 1992, Response to Additional Information Request.

maximized at 365 cfs; ODFW has determined that there are not currently any fry in the project area, and that when reintroduced they would be present less than one-half of the year; and that some adjustment of the 365 cfs maximizing flow for adults and spawners is appropriate for juveniles, we recommend that the Commission set a flow of between 300 cfs and 365 cfs for the fishery in the bypass reach.

Our recommendation is subject to the Commission's determination of whether a greater flow would be appropriate for recreational purposes; and approval of the fish and wildlife agencies of some greater flow in the event that recreational needs call for it.

b. Gravel Replacement and Other Habitat Improvements in the Bypass Reach.

Both the federal and state fish agencies and the Applicant "agree that there is a lack of gravel in the upper Deschutes River Basin, and that the Bend Project dam is one of several dams that block downstream movement of gravel."<sup>19</sup> As a consequence, there is no spawning habitat in the Project's bypass reach.<sup>20</sup>

The Commission should require the Applicant periodically to replace gravel pursuant to a plan submitted to the fish and wildlife agencies, with notice to the intervenors, within 6 months of the issuance of any license, and implemented immediately after

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<sup>19</sup> Application at Volume II, Exhibit E, Page 3-22.

<sup>20</sup> Id.

its approval by the fish and wildlife agencies; and to implement the other habitat improvements recommended by ODFW for the bypass reach, including the placement of woody debris, flow deflectors and logs to improve spawning and rearing habitat, within 6 months of the issuance of any license.

C. Recreational Opportunities

Before issuing a license, the Commission is required to assure that the "project . . . will be best adapted to a comprehensive plan for . . . beneficial public uses, including recreational purposes,"<sup>21</sup> and to give "equal consideration to the purposes of . . . recreational opportunities."<sup>22</sup> Commission policies and regulations require the Commission to "evaluate the recreational resources of all projects . . . and seek . . . the ultimate development of these resources."<sup>23</sup>

The current license for the Bend Project contains no conditions addressing recreation or aesthetic considerations. As a result, the project has adversely affected recreational opportunities and aesthetics in this reach of the Deschutes River. While Mirror Pond Reservoir is used for some recreational activities, the bypass reach downstream from the Bend project is often dewatered due to the lack of minimum instream flow

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<sup>21</sup> 16 U.S.C. § 803(a)(1).

<sup>22</sup> 16 U.S.C. § 797(e).

<sup>23</sup> 18 C.F.R. § 2.7

requirements. It consequently provides limited or no opportunities for boating, fishing, canoeing, or other recreational activities. Moreover, public access to this reach is almost impossible under current conditions. Moreover, to say that the switching station is an eyesore is an understatement of how severely it mars the aesthetics of the river, not to mention the potentially adverse health effects it may engender.

As we have noted in the past, the assessment of restoration and enhancement of recreation and aesthetics in the project area by PP&L remains deficient. The Applicant has never analyzed the costs and benefits of moving the switching station to restore the historic and aesthetic value of the river at Bend and the surrounding area; providing access through the powerhouse to the City park and the Deschutes River Trail located on the other side of the powerhouse; setting flows sufficient to restore lost recreational boating opportunities to the bypass reach; and providing an access point to the bypass reach for boating.

We thus recommend that any license that is issued contain conditions requiring the Applicant:

- (1) to move the switching station from the river bank;
- (2) to provide public access through the powerhouse to the City park and the river trail located on the other side of the power house;
- (3) to establish flows in the bypass reach sufficient to support boating pursuant to a release test conducted after notice

to the intervenors within 6 months of the issuance of any license;

(4) to provide public boat access to the bypass reach.

All of these conditions should be incorporated into the license after notice to, consultation with, and approval of all of the intervenors as to the specifics of each of these recreation/aesthetic conditions.

D. Mitigation and Decommissioning Funds

1. Mitigation Requirements

The Applicant's Project at Bend has admittedly contributed to the decline of the fishery in the Deschutes River Basin over some 80 years, while it has operated without any conditions in its license for, among other things, fish passage, fish protection, instream flows, or a gravel replacement plan. If the Commission determines to issue a power license to PP&L for another two generations, it should condition the license on the establishment of a trust mitigation fund, established by the deposit on an annual basis over the life of the license, and commencing one year from the beginning of project operations under any new license that may be granted, of five (5) percent of annual project revenues derived from the project.

The fund should be dedicated to the purchase of riparian lands and water rights in and affecting the greater Bend urban growth area, including the purchase of water rights dedicated to instream uses in the Deschutes river in that area. The fund may also be used, at the discretion of its Trustees, to defray a portion of the

costs of ODFW's Deschutes River Mitigation and Enhancement Program.

The trustees should be comprised of a representative of each party intervenor or petitioner for intervention (e.g., the Department of Interior) in this proceeding. The Trust fund should be titled the Deschutes River Trust Fund and established according to the laws of the state of Oregon and the United States. The Applicant should be required to submit, three months after the grant of any license in this proceeding, a draft of the legal papers establishing the Trust to the Commission and the Intervenor, in conformance with the general requirements set out above. After approval by the intervenors, the Commission should incorporate the Trust provisions and papers as conditions of the license.

E. Decommissioning/Removal Fund

The petitioners recommend that the Commission require PP&L to establish some method of guaranteeing that the costs of decommissioning and/or removing this project if it grants a new license. The reasons for our position on this point were set out in detail in our intervention papers. Such provision could be made any number of ways, as we said there (e.g., a percentage of generating revenues over the term of the license; a bond covering the estimated costs of decommissioning/removal).

No matter what method is chosen, however, it is incumbent on the Commission to ensure that funds sufficient to cover the costs of decommissioning and/or removal will be available so that those

options are not closed to the Commission at the end of the license term.

F. A Reopener Clause is Necessary for Several Reasons

It is clear from our comments and recommendations concerning fishery and recreational flows, the implementation of recovery plans that may be necessary for bull trout, and a number of other matters which are not fully developed at this time, such as the establishment of the Deschutes River Trust Fund, that any license should contain a reopener clause in order to resolve any implacable differences among the parties and intervenors that may arise from duties that are subject to approval at some time after the license is issued; and in any event, to address concerns involving the public interest that may arise during the pendency of the license.

G. Term of Any License that May be Granted

Because of the safety concerns surrounding the dam, as outlined in the proposed scope of work submitted to the Commission by separate motion today, and the evolving restoration of the Deschutes River fishery, if the Commission determines to grant a license in this matter, it should be no longer than 30 years and preferably should be for a much shorter time in order to provide the Commission and interested parties the opportunity fully to reassess the public need for hydropower generation at this site.

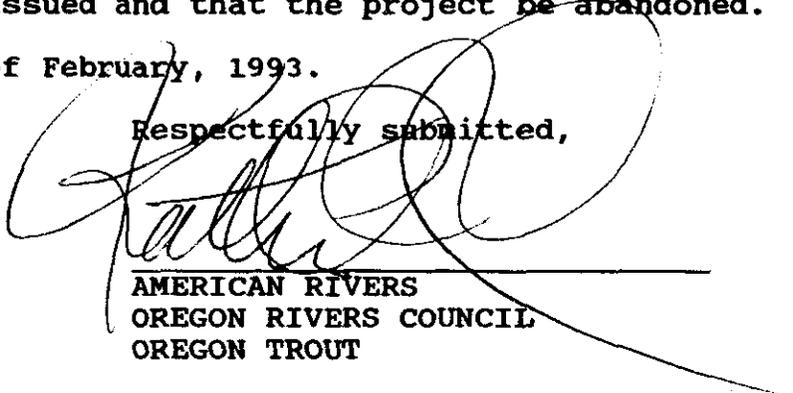
IV. CONCLUSION

American Rivers, Pacific Rivers Council, and Oregon Trout therefore respectfully request that the Commission adopt the

foregoing recommendations. While these Conservation Petitioners do not object to the issuance of a license for this project provided that all of their recommendations for license conditions are incorporated into the license, if the Commission should determine not to include our recommendations and conditions, we recommend that a license not be issued and that the project be abandoned.

Dated this 4<sup>th</sup> day of February, 1993.

Respectfully submitted,



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AMERICAN RIVERS  
OREGON RIVERS COUNCIL  
OREGON TROUT

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# Protection requested for bull trout

■ Environmentalists say logging  
and development endanger the  
fish in Oregon and other states

*Oregonian 10/29/92*  
The Associated Press

WASHINGTON — Environmentalists petitioned the government Wednesday to declare the bull trout an endangered species in Oregon and four other Western states, saying its river habitat is being destroyed by logging and other development.

Three groups based in Montana asked the U.S. Fish and Wildlife Service to grant the fish emergency protection under the Endangered Species Act in Montana, Idaho, Oregon, Washington and Nevada.

Because the Forest Service considers the bull trout to be a key indicator of the health of many national forests in the region, dramatic declines in its population warn that entire aquatic ecosystems are threatened, the petition said.

The fish survives only in clear and cold mountain streams, migrates more than 100 miles to spawn and typically weighs 5 pounds. It already has gone locally extinct across about half its known range and no longer is found in California, the petition said.

The petition said bull trout habitat and population have been degraded as a result of logging, road building, cattle grazing, mining, poaching, overharvesting, dam construction, irrigation, pesticides and home construction.

No studies have documented the remaining population of bull trout, said Mike Bader, director of the Alliance for the Wild Rockies in Missoula, Mont. But Bader estimated it would be less than 10,000, about 4,000 of those in the northern Rocky Mountains.

In Oregon, the bull trout is in critical condition, according to the Oregon Department of Fish and Wildlife. The only remaining significant populations in Oregon are found in the McKenzie, Metolius, Malheur and Klamath river systems, said Hal Weeks, coordinator of the agency's threatened and endangered species program.

"We're really concerned about it," Weeks said.

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CERTIFICATE OF SERVICE

I, Katherine P. Ransel, hereby certify, under penalty of perjury, that on February 5, 1993, a copy of the foregoing AMERICAN RIVERS, THE PACIFIC RIVERS COUNCIL (FORMERLY THE OREGON RIVERS COUNCIL) AND OREGON TROUT'S COMMENTS, RECOMMENDATIONS, TERMS AND CONDITIONS was mailed to the following parties and/or counsel for parties in the above captioned matter:

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