

**ENVIRONMENTAL INSPECTION REPORT  
(ELECTRONICALLY SUBMITTED)  
FEDERAL ENERGY REGULATORY COMMISSION**

**Portland Region**

**Date of Inspection:** September 27, 2004

**Date of Last Inspection:** August 23, 2000

**Name:** Klamath

**Project No.:** 2082

**Development(s):** Eastside/Westside, Keno, JC Boyle, Copco 1, Copco 2, and Iron Gate

**Licensee:** PacifiCorp

**License Type:** Major

**License Issued:** January 28, 1954

**License Expires:** February 28, 2006

**Location (waterway):** Klamath River

**Location (geographic):** Klamath and Siskiyou Counties, OR

**Inspector:** Erich G. Gaedeke

**Licensee Representatives:** Connie Snyder and Dan Blevin

**Other Participants:** John Hamilton- FWS

**Summary of Findings:** The licensee is currently undergoing relicensing. Due to the age of the current license, there are minimal requirements with regard to environmental resources. The operation of the project is heavily influenced by the operation of the Bureau of Reclamation's Link River Diversion Dam on Upper Klamath Lake and major irrigation diversions, which also begin at Upper Klamath Lake. As a result, minimum flows are heavily influenced by BOR releases and are often less than the license required minimum flows. During the inspection, poor flow conditions were observed in the Keno and JC Boyle fish ladders. Additionally, the Iron Gate Reservoir was being drawn down 10 feet over a 2-week period to replace the Camp Creek and Mirror Cove boat ramps. During the inspection, one unit was operating at the Eastside powerhouse with a flow of 1000 cfs, the Westside powerhouse was out of service for maintenance, one unit was operating at the JC Boyle powerhouse with a flow of 1200 cfs, Copco 1 and 2 powerhouses were not operating, and one unit was operating at Iron Gate with a flow of 900 cfs. A follow-up telephone call with the licensee regarding fish ladder operations occurred on October 25, 2004.

**Other Notes:** Please note that this inspection report only covers current license requirements and activities and does not include license requirements that have already been fulfilled.

Submitted December 8, 2004  
 Erich G. Gaedeke  
 Fishery Biologist

### A. Inspection Findings

| Requirements*  | Requirement Date | Follow-up Needed | Photo No's. |
|--|------------------|------------------|-------------|
| <b>FISH AND WILDLIFE RESOURCES</b>   |                  |                  |             |
| Art. 49: Construct, operate, and maintain fish facilities                      | LR               | No               | 1, 2        |
| Art. 50: Construct fish trapping, collecting, holding, and spawning facilities | LR               | No               | 5, 6, 7     |
| Art. 52: Minimum flows below Iron Gate   | LR               | No               |             |
| Art. 69: Minimum flows at Fall Creek Diversion Dam                             | LR               | No               |             |
| <b>RECREATION RESOURCES</b>  |                  |                  |             |
| Part 8 CFR: Recreation signing and posting (Part 8 CFR)                        | Current Reg's    | No               | 12          |
| <b>PUBLIC SAFETY</b>   |                  |                  |             |
| Facilities and measures to assure public safety (Part 12 CFR)                  | Current Reg's    | No               | 13, 14      |

\* **Art** = Article Number    **O** = Order    **LR** = License Requirement    **SA** = Settlement Agreement    **CFR** = Code of Federal Regulations    **On** = Operational    **OP** = Ordering Paragraph Letter    **Ap** = Approved    **F** = Filing

### B. Comments

#### FISH AND WILDLIFE

The licensee operates and maintains fish ladders at Keno (Photograph 1) and JC Boyle (Photograph 2) for resident fish passage. Of particular concern are the shortnose suckers, which are listed under the ESA. On the day of the inspection, the Keno ladder was flooded and the JC Boyle ladder had minimal flow over the weirs. According to the licensee, the FWS requested more attraction flow at the Keno ladder; however, the auxiliary water supply system was maxed-out. As a result, the licensee increased ladder flows resulting in poor ladder flow and fish passage conditions. The JC Boyle ladder had minimal flow over the weirs, which could deter passage for those species utilizing the overflow section of the weirs. As a result of unclear ladder operational procedures and criteria, I had a telephone conversation with the licensee's biologist on October 25, 2004. According to the licensee, there has been much confusion and direction from the resource agencies regarding the ladders' operation. He stated that they were in the process of preparing operation plans for the ladders and a draft of the plans was scheduled to be submitted to the resource agencies in November. I requested that a copy of the final plans be sent to me.

The licensee operates and maintains fish screens at JC Boyle to protect downstream migrants. Fish are diverted to a bypass pipe (Photograph 3), which enters the bypassed reach just downstream of the dam. The outfall pipe was recently extended and the plunge pool was excavated to help protect downstream migrants.

The licensee provides funding to the California Department of Fish and Game for the operation of the Iron Gate Fish Hatchery (Photograph 5). Salmon and steelhead enter the ladder (Photograph 6) at the base of Iron Gate Dam, which directs them to a series of holding ponds (Photograph 7) for collection and transport to the hatchery. The licensee also maintains nesting platforms for osprey at Copco 1 and Iron Gate reservoirs.

Article 52 specifies the following minimum flows below Iron Gate:

| <u>Period</u>  | <u>Flow</u> |
|----------------|-------------|
| Sept 1-Apr 30  | 1300 cfs    |
| May 1-May 31   | 1000 cfs    |
| June 1-July 31 | 710 cfs     |
| Aug 1-Aug 31   | 1000 cfs    |

## RECREATION

Recreational facilities operated and maintained by the licensee at the project include: a) the Link River Bird Sanctuary and Small Animal Refuge, which includes trails and vault toilets; b) South Bank Recreation Site (Photograph 8), which includes camping, restroom facilities, boat launch and docks (Photograph 9), and a parking lot; c) Pioneer Park, which includes picnic facilities, vault toilets, and boat launch; d) Klamath River fishing access sites, which contain vault toilets at some of the sites; e) Copco Cove, which includes picnic facilities, a portable toilet, and boat launch; f) Mallard Cove (in cooperation with the BLM), which includes a parking lot and boat launch; g) Overlook Park, which includes picnic facilities and fishing access; h) Long Gulch, which includes a campsite and boat launch; i) Iron Gate dam parking lot and boat launch; j) Mirror Cove, which includes camping, vault toilets, and boat launch; k) Juniper Point Camp, which includes camping and a swimming area; and l) Camp Creek, which includes camping (Photograph 10), picnic facilities, and boat launch (Photograph 11). A Part 8 sign is located near the entrance to the Iron Gate Fish Hatchery (Photograph 12) and near the entrances to the other project campgrounds.

On the day of the inspection, the licensee was initiating a drawdown of the Iron Gate Reservoir to replace the Mirror Cove and Camp Creek boat ramps. The reservoir was being drawn down 10 feet over a 2-week period to replace the ramps. All facilities were in satisfactory condition on the day of the inspection.

## PUBLIC SAFETY

The licensee maintains boat-restraining barriers at each of the project dams (Photograph 13); however boating is prohibited at Copco 2 and Fall Creek so boat barriers are not required. Appropriate fencing and warning signs are also maintained around the project (Photograph 14). All barriers, signage and fencing were in satisfactory condition on the day of the inspection.

## C. PHOTOGRAPHS

Included as part of this report are 14 photographs that show the features and condition of the project at the time of the inspection.

Klamath Project, FERC No. 2082  
September 27, 2004



Photograph 1: Keno vertical slot fish ladder.



Photograph 2: JC Boyle pool and weir fish ladder.

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Photograph 3: JC Boyle bypass reach minimum flow and downstream migrant release pipe.



Photograph 4: New fish ladder construction at BOR's Link River Dam.

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Photograph 5: Iron Gate fish hatchery.



Photograph 6: Iron Gate pool and orifice ladder to fish holding ponds.

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Photograph 7: Fish holding ponds below Iron Gate.



Photograph 8: South Bank Recreation Site.

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Photograph 9: South Bank Recreation Site boat launch.



Photograph 10: Camp Creek Campground.



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Photograph 11: Camp Creek Campground boat launch.



Photograph 12: Part 8 sign at Iron Gate.

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Photograph 13: Boat barrier upstream of Copco 1.



Photograph 14: Warning sign below Copco 2.