Collaboration or Confrontation? Take your pick
Clark Fork Projects Hydro Relicensing

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Abstract

In the United States, privately owned hydroelectric facilities operate under fifty year licenses issued and administered by the Federal Energy Regulatory Commission (FERC). The usual process of license renewal involves consternation, confrontation, and litigation, resulting in delayed environmental mitigation and damaged professional relationships. Faced with the upcoming relicensing of two large hydroelectric facilities in the year 2001, Avista Corporation (formally Washington Water Power Company) knew that there had to be a better way. In February of 1999, Avista Corporation filed a renewal application culminating seven years of environmental studies and consultation with state and federal agencies, tribes, local government, landowners, and special interest groups. The heart of the application is the Clark Fork Settlement Agreement, representing consensus among 27 parties on all environmental and operational issues. The Settlement Agreement, based on the principles of adaptive management, provides for greater local control, allows for early implementation of natural resource enhancements (March 1999), provides for the management of dynamic resources through the new term of the license, and establishes long term, collaborative working relationships. This Clark Fork collaborative is nationally recognized as a model for FERC's recently adopted alternative approach to relicensing.

Bull trout (*Salvelinus confluentus*) recovery is a key issue in the relicensing of the Clark Fork projects. Listed as threatened under the Endangered Species Act, bull trout are the subject of a comprehensive restoration plan developed by the collaborative participants. Avista Corp. funding of fisheries programs in northern Idaho and northwestern Montana will benefit all native salmonids, but with a particular emphasis on bull trout.

Introduction

The Noxon Rapids and Cabinet Gorge hydroelectric projects have operating licenses issued by The Federal Energy Regulatory Commission (FERC) for a period of 50 years and these licenses expire in February 2001. Avista Corporation's application to FERC for a new 45-year license on February 18, 1999 culminated seven years of planning and consultation with agencies, Indian tribes, environmental organizations, and the general public.

The heart of the application is a comprehensive settlement agreement reached with 27 stakeholder groups on January 28, 1999 that resolves all interests regarding operational and environmental issues. The pre-filing settlement agreement is expected to greatly facilitate the FERC review and result in the unprecedented issuance of a new license on or before the time the licenses expire.

Avista Corporation (Avista Corp) initiated consultation in 1996 utilizing a collaborative approach now called the Alternative Relicensing Process, that relies heavily upon consensus based decision making,

wide stakeholder participation and issue based negotiations. A process called the Living License™, based upon effective collaboration and the principles of adaptive management, evolved from Avista Corp's desire to utilize a process that avoided the contentious nature of many relicensing proceedings. The Alternative Relicensing Process has now been codified in FERC regulations.

The Projects

Noxon Rapids and Cabinet Gorge dams, collectively referred to as the 'Clark Fork Projects', are located in western Montana and northeastern Idaho on the lower Clark Fork River (Figure 1). Cabinet Gorge Dam, completed in 1952, is a load following, power peaking facility with a maximum generating capacity of 236 megawatts (MW) from its four turbines. At full pool, the Cabinet Gorge Dam creates a 3,200-acre reservoir with a maximum depth of 121 feet. The reservoir is 20 miles long. Completed in 1958, Noxon Rapids Dam is a load following, power peaking facility with a maximum generating capacity of 554 MW from its five turbines. At full pool, the Noxon Rapids Dam creates a 7,940-acre reservoir, with a maximum depth of 200 feet. The reservoir is 35.5 miles long and extends upstream to near the town of Thompson Falls, Montana. To facilitate relicensing, the Noxon Rapids license was amended in 1995 to accelerate the expiration date from April 30, 2005, to February 28, 2001, and be coincident with the expiration date for the Cabinet Gorge license.

The Clark Fork Projects produce annually an average of 2,900,000 MW hours of electricity with a combined peaking capability of 790 MW, representing approximately one-half of Avista Corp's peak generating capability.

The Clark Fork River is the largest river in Montana, based on discharge, with an annual average discharge just over 22,000 cubic feet per second (cfs). The maximum historical flow was 195,000 cfs, recorded in 1894. The hydraulic capacity of Cabinet Gorge and Noxon Rapids turbine units is 35,700 cfs and 51,000 cfs, respectively.

The Collaborative Relicensing Process

Avista Corp began planning for the relicensing of the Clark Fork Projects in 1992 with the goal to achieve a more positive outcome than observed in many relicensing proceedings. A collaborative consultation process was considered to best meet Avista Corp interests and offer the best opportunity for success with stakeholders. The collaborative focused stakeholders to jointly develop protection, mitigation, and enhancement (PM&E) measures that address issues the parties' reached by consensus.

The collaborative began in mid-1996 when stakeholders met in Noxon, Montana, and with the help of a neutral facilitator developed a process for participating in the relicensing of the Clark Fork Projects. Calling themselves the Clark Fork Relicensing Team (CFRT), the group was comprised of representatives from 39 organizations, including federal agencies, state agencies from Idaho and Montana, five Indian tribes, nongovernment organizations, conservation groups, property owners, and Avista Corp. The CFRT also organized five technical work groups to support their effort to reach consensus:

- Fisheries Technical Work Group,
- Water Resources Technical Work Group,
- Wildlife, Botanical and Wetlands Technical Work Group,
- Land Use, Recreation and Aesthetics Technical Work Group, and

- Cultural Resources Management Group.

Avista Corp recognized early on that a successful outcome to the consultation process would rely upon the creation of an effective negotiating environment among a group of stakeholders who had widely varying interests, roles and legal responsibilities. The negotiating environment was established upon the following general concepts:

- Involvement and education of all stakeholders,
- Ownership and confidence in the process,
- Principle based negotiations where issues form the basis for studies and PM&E measures, and
- Urgency to negotiate using early implementation as an incentive.

Confidence within the stakeholder group for the negotiation process greatly facilitated a successful outcome. Initiatives advanced by Avista Corp, which promoted this confidence, were:

- Neutral facilitation,
- Consensus based decision making,
- Funding of stakeholder to help offset participation costs,
- Noxon Rapids license acceleration,
- Pre-consultation natural resource studies,
- Pre-consultation workshops for natural resource studies and relationship building,
- Collaboratively written Environmental Assessment and License Application,
- Invited Trout Unlimited to partner in process,
- Commitment to early implementation of PM&E measures upon obtaining comprehensive settlement agreement,
- Early FERC involvement at beginning of consultation, and
- Early NEPA scoping at beginning of consultation.

Settlement Agreement

The Clark Fork Settlement Agreement was finalized on January 28, 1999 when signatures were obtained from the 27 stakeholder groups engaged in the FERC relicensing process. The Settlement Agreement was filed with the license application on February 18, 1999 (Avista Corp 1999a). As a condition of settlement, Avista Corp initiated implementation of the proposed license conditions on March 1, 1999 two years before license expiration and initiating the funding of approximately $4.7 million annually for PM&E measures benefiting natural and cultural resources of the project area (Avista Corp 1999b). Avista Corp maintains much of the existing load following and peaking capability of both hydro facilities. The Clark Fork Settlement Agreement is unprecedented in the following ways:

- The first ever comprehensive, pre-filing settlement for a large hydroelectric project,
- The first acknowledged national model for collaborative relicensing,
- A new system of license implementation and compliance (the Living License™),
- A pre-filing Programmatic Agreement signed by five tribes, two states and the U.S. Forest Service that resolves cultural and historical resource issues,
- Incorporation of the terms and conditions of mandatory conditioning authorities with local-based, consensus decision making,
- A collaboratively prepared environmental assessment and license application,

- The first modern relicensing of a large project expected to be granted on time, and
- The first relicensing process resulting in early implementation of new license terms.

The Clark Fork Settlement Agreement becomes the mechanism for sustaining the collaborative relationships needed to implement a common and always evolving community vision for the river and is the basis for FERC to issue a new license for operation of The Clark Fork Projects.

Signatories to the agreement are:

•Idaho State Historic Preservation Office
•Montana B.A.S.S. Federation
•Noxon-Cabinet Shoreline Coalition
•Cabinet Resource Group
•Rock Creek Alliance
•Lake Pend Oreille Idaho Club
•Alliance for the Wild Rockies
•Coeur d'Alene Tribe
•Kalispel Tribe
•United States Fish and Wildlife Service
•Idaho Division of Environmental Quality
•Idaho Department of Parks and Recreation
•Montana Department of Fish, Wildlife and Parks
•Montana State Historic Preservation Office
•Sanders County, Montana
•Trout Unlimited
•Green Mountain Conservation District
•Idaho Rivers United
•Elk Creek Watershed Council
•Tri-State Implementation Council
•Avista Corporation
•Confederated Salish and Kootenai Tribes
•Kootenai Tribe of Idaho
•United States Department of Agriculture, Forest Service
•Idaho Department of Fish and Game
•Montana Department of Environmental Quality
•Montana Department of Natural Resources and Conservation

The PM&E measures contained within The Clark Fork Settlement Agreement reflect consensus on a broad range of environmental and cultural resource interests. By retaining much of the load following and peaking capability of the Clark Fork Projects, Avista Corp is able to continue to provide an economic source of electricity to customers in northern Idaho and eastern Washington.

The PM&Es contained within the Clark Fork Settlement Agreement are:

- Idaho Tributary and Fishery Enhancement Program (administered by the Idaho Department of Fish and Game (IDFG)),
- Montana Tributary and Recreational Fishery Enhancement Program (administered by the Montana Department of Fish, Wildlife and Parks (MDFWP)),
- Fish Passage/Native Salmonid Restoration Plan (administered by the U.S. Fish and Wildlife Service),
- Bull Trout Protection and Public Education Project (Administered jointly by IDFG and MDFWP),
- Watershed Council Program,
- Support of Tri-State Implementation Council for Water Quality Monitoring,
- Monitoring Noxon Reservoir Stratification,
- Aquatic Organism Tissue Analysis of potential heavy metal contamination,
- Water Quality Protection and Monitoring Plan for Maintenance, Construction and Emergency Activities,

- Gas Supersaturation, Biological and Engineering Studies,
- Implementation of Land Use Management Plan,
- Implementation of Recreation Resource Management Plan,
- Implementation of Aesthetics Management Plan,
- Implementation of Wildlife, Botanical and Wetland Management Plan,
- Wildlife Habitat Acquisition and Enhancement Fund,
- Black Cottonwood Habitat on Avista Corp Property (3 sites: Big Eddy, Hereford Slough and Noxon Slough)
- Wetlands on Avista Corp Property,
- Bald Eagle Monitoring and West Site Management,
- Peregrine Falcon Monitoring,
- Common Loon Monitoring and Nest Protection,
- Clark Fork Delta Erosion Remediation and Habitat Acquisition,
- Forest Habitat for Selected Avista Corp Lands,
- Reservoir Islands Owned by Avista Corp,
- Clark Fork Heritage Resource Program,
- Erosion Fund and Shoreline Stabilization Guidelines Program, and
- Project Operating Limits.

Bull trout (*Salvelinus confluentus*) recovery is a key local issue in the relicensing of the Clark Fork Projects. Listed as threatened under the Endangered Species Act, bull trout are the subject of a comprehensive restoration plan developed by the collaborative participants. Avista Corp funding in excess of $2 million annually for PM&E fisheries programs in northern Idaho and northwestern Montana will benefit all native salmonids, but with a particular emphasis on bull trout.

Native Salmonid Restoration Plan

The process of examining fish passage on the lower Clark Fork River within the context of relicensing for the Clark Fork Projects began in the committee appointed by the CFRT that oversees fishery issue, the Fisheries Working Group (FWG). FWG members worked collaboratively for a period of approximately ten months on the identification of issues and the processes required to address each issue related to fish passage and restoration efforts for native salmonids on the lower Clark Fork River.

There are two primary interests relative to fish passage. One interest is whether passage at Cabinet Gorge and/or Noxon Rapids dams would be an effective tool to increase the viability of native salmonid populations, bull trout and westslope cutthroat trout (*Oncorhynchus clarki*), in the lower Clark Fork River, its tributaries, and Lake Pend Oreille. The other interest is the possibility of re-establishing connectivity for migratory stocks of native salmonids. Connectivity refers to the ability of fish stocks to move, mix, and potentially support or re-establish populations in close proximity to one another. Both of these interests are though to be essential components when considering restoration of native salmonids.

An overall plan that adequately addresses this interest required a format to effectively use information resulting from the myriad of activities that must occur during a native salmonid restoration effort. The Native Salmonid Restoration Plan (Klein Schmidt Associates and Pratt 1998) provides a structure for the step-wise examination of issues influencing the planning for fish passage and is designed to function irrespective of species and location. The FWG has determined that the primary species of interest for

this effort include bull and westslope cutthroat trout, while secondary species of interest include the native mountain whitefish and the introduced rainbow trout, brown trout, and kokanee salmon.

The Native Salmonid Restoration Plan (Plan) begins with a scoping process that uses a series of modeling exercise, that focus the discussion on potential fish population trends given the existing habitat conditions. The process of using mathematical modeling exercises incorporates existing information and input to guide or clarify planning direction. This guidance will be important both in the initial planning stages and periodically throughout the life of the program. The scoping exercise will also provide a common understanding of existing data and how it relates to fish survival at the population level. From this common basis, realistic goals and objectives for restoration planning can evolve.

Implementation of the programs supporting successful survival, and ensuring recovery, of fish populations can only occur after careful planning and scoping. Each implementation program will have measurable objectives as determined by the scoping process. The Plan identifies the frequency, duration, and the need for processes to monitor fish passage activities or programs supporting the recovery of target fish populations. Examination of monitoring data at periodic intervals will check the progress of each program's contribution towards restoration goals. This process allows for a plan designed on adaptive management that utilizes the best available scientific evidence. The plan is flexible; accommodating tactical and strategic revision as new information from the programs becomes available.

While fish passage itself may be feasible, there are several issues that influence whether upstream passage of bull trout, westslope cutthroat or other salmonids is appropriate. The Plan provides for the examination of pathogen distribution, stock genetics, distribution of introduced or exotic species, stock abundance, and the suitability of current and potentially available habitats. Through these evaluations, decision-makers can define preferred or appropriate stocks of fish for the passage programs. If preferred fish stocks are not available, the Plan outlines a process to re-examine fish stock options in three ways. First, the stock suitability standards could change to accommodate the use of the fish that are available within a specific time frame. Second, a suitable stock found in an area outside the area of interest could utilize in a transfer program. And third, a hatchery program that utilizes disease free, genetically pure stocks could be an option. When there is agreement that reasonable numbers of a suitable stock exist for passage, planning for an effective passage program can begin.

The Plan suggests a step-wise approach to looking at specific geographic regions for restoration efforts, called focus areas. In the current form, these areas are primarily the river reaches between the Clark Fork Projects and the associated tributaries. This approach assumes that success of the restoration effort will most likely use adaptive management techniques and then incorporate knowledge developed from successes and failure into subsequent activities. At the same time the Plan is flexible enough to accommodate a more expansive or broad-reaching approach if analysis of the data and objective-setting exercises determined that this approach shows the most promise for overall success. Whatever level the goals and objectives are focused on, the process still offers a structural guide for examining native fish passage and restoration plan.

One of the primary goals of the Plan is to develop a process that includes, and, in fact, is build upon, opportunities to examine, refine and develop policies at the appropriate time. While it is not appropriate, at this time, for the Plan to state or develop policy, it is necessary to make some basic

assumptions concerning important or potentially controversial topics. The common ideas and intentions identified during this Collaborative Process will serve to guide the planning process.

Living License™

The Living License™ approach that Avista Corp developed for implementation relies heavily upon the successful collaborative consultation process. The working relationships and pride in the Settlement Agreement carry over into implementation and the participation in the management and technical committees that oversee the PM&E programs and the expenditure of funds. Tribes, agencies, community advocates, landowners and other organizations become long term collaborative partners with Avista Corp working toward a common resource goal for the Lower Clark Fork River. The benefits of this approach include:

- Greater local control and decision-making regarding management and regulation of river resources,
- Implementation of PM&E measures sooner rather than later,
- An ability for this and future generations to learn and act on both the successes and mistakes of actions taken to meet a common vision for the river, and
- Collaboration and decision making that works across organizational, personal and cultural lines.

Common sense and an eye toward history are major reasons the CFRT decided to craft a Living License™. History, for instance, shows the long-term ineffectiveness of traditional licenses that have little opportunity for change or input once issued. Because of this, stakeholders are inclined to try to predict the future and take an appropriately conservative approach of asking for everything that they could possibly need for the next 30 to 50 years. In contrast, licensees fight to keep the security and certainty of a closed license and challenge what they see as costly, speculative, and excessive environmental measures. The result is that lawyers for all parties are kept busy, and issuance of a new license is postponed sometimes for many years. The Living License™ helps to avoid this clash and focuses energy and money on benefiting the “on the ground” resources without lengthy delays.

The Living License™ relies heavily on the concepts of adaptive management. Adaptive management (cite) is the process of change, but not random change. Rather, change in response to some outside influence in the environment that enables an organism or organization to better adjust to its circumstances and respond as it learns. In recent years the term adaptive management has been used to describe an approach to making management decisions, emphasizing conscious experimentation and learning. It is in this light that an adaptive management approach to implement PM&E measures will be used for the Clark Fork Projects.

The Living License™ approach will initially employ highly developed PM&E measures considered feasible to have a high chance of success. The success of these initial PM&Es will be evaluated by the technical advisory and management committees using the monitoring programs established through the settlement agreement and described in FERC license articles. Based on the results of the evaluations, the PM&E measures will either be fine-tuned to improve them or new PM&E measures will be developed to replace them.

Stakeholder interests, conditions, and recommendations are embodied in the PM&E measures, settlement agreement, license application, and National Environmental Policy Act (cite) document.

Agency recommendations include the mandatory terms and conditions under Sections 4(e), and 18 of the Federal Power Act (cite). The Living License™ allows Avista Corp and stakeholders to address interests and issues identified and agreed upon in the collaborative within an ongoing and flexible implementation process.