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“Summary of 1998 Settlement Agreement Between PacifiCorp and Interested Parties That Provided a Widely Accepted Proposal and Legal Framework for the Decommissioning and Removal of Condit Dam on the White Salmon River of South Central Washington State“.

Introduction:

In fall of 1999, PacifiCorp signed a historic settlement agreement with certain parties involved in the re-licensing of the Condit Hydroelectric Project in the south central portion of Washington state.¹ The agreement outlined a strategy for decommissioning Condit Dam hydroelectric generating facility via removal of the dam and appurtenance structures using specific methods and subject to certain time, method and financial constraints.

Background:

Condit hydroelectric project was built at river mile (RM) 3.25 of the White Salmon River during a surprisingly brief 10 month period beginning spring of 1912 and extending to the following spring of 1913. The dam and downstream powerhouse were built by the Northwestern Electric Company of Portland Oregon, principally to provide power to the Crown Willamette Paper Mill in Camas. Additional power was provided to Clark County, Camas, Vancouver and Portland. The power plant located at RM 2.2 one mile below the dam, generates a total of 14 megawatts of power, and currently feeds into the Northwest power grid.

Two unsuccessful attempts to provide fish ladders were made in the decade following construction of the dam. Both of these ladders were lost, presumably by high flows. Faced with these difficulties, the company approached the Washington State Fish Commission (predecessor to the Washington Department of Fish and Wildlife) to request annulment of responsibility to provide fish passage at the dam. District Commissioner L.H. Darwin of the Fish Commission subsequently inked such an agreement with the company. The agreement specified that for the sum of \$5,000, the project owners would be absolved of any state requirements to provide fish ladders at the dam. No tribal (or presumably federal) interests were consulted during formulation of the agreement.

In 1947, PacifiCorp's predecessor Pacific Power and Light (PP&L) absorbed the Northwestern Electric

¹ The parties to the PacifiCorp Settlement Agreement included the Yakama Indian Nation, U.S. Forest Service, U.S. Department of Interior, National Marine Fishery Service, Washington Department of Ecology, Washington Department of Fish and Wildlife, American River, American Whitewater Affiliation, Columbia Gorge Audubon Society, Columbia Gorge Coalition, Columbia River Unite, Federation of Fly Fishers, Friends of the Columbia Gore, Friends of the Earth, Friends of the White Salmon, The Mountaineers, River Council of Washington, The Sierra Club, Trout Unlimited, Washington Trout, Washington Wilderness Coalition and the Columbia River Intertribal Fish Commission.

Company and all of its facilities including the Condit Hydroelectric Project. In 1963, PP&L applied to the Federal Power Commission (predecessor of the Federal Energy Regulatory Commission, or FERC) for a license to operate the project. This application was successful, and in 1968 the Federal Power Commission granted PP&L a license to continue operations effective May 1, 1965 and terminating December 31, 1993.

On December 27, 1991, PacifiCorp (PP&L successor) filed an application with the FERC for a new license to operate the Condit Project. Between then and December 31, 1993 (original FERC permit expiration date), the company became involved in various phases of the re-licensing process. Since then, PacifiCorp has remained involved with the re-licensing process. The drawn-out nature of re-licensing, and many involved agency consultations, has necessitated operating the project under a series of annual licenses, pending final determination and license issuance.

After submission of the required re-application material and agency consultations, FERC staff prepared and issued a final environmental impact statement (FEIS) dated October 1996. The FEIS amounted to a description of the existing project environment, and the expected environmental impacts of re-licensing. The FEIS also compared positive and negative impacts of several different re-licensing scenarios, established a staff-recommended “preferred alternative” for re-licensing. Subsequently, after consideration of benefits / costs and the recommendations of agencies, groups and individuals, FERC staff recommended re-licensing the facility under the scenario desired by PacifiCorp with the following added conditions:

- installation of upstream and downstream fish passage facilities at both the dam and powerhouse;
- maintenance of specific bypass reach minimum flows below the dam and powerhouse tailrace fish passage facilities;
- placement of spawning gravel downstream of the dam and powerhouse;
- converting the project to a run-of-river operation, and ceasing power generation at natural flows of less than 450 cfs;
- incorporation of flow continuation capabilities and relief systems; and finally
- performance of effectiveness monitoring.

Subsequent to careful review, PacifiCorp notified FERC in March 1996 that the project would be rendered uneconomical if a new license were issued using the FEIS staff recommended alternative and added conditions. The company estimated the cost of compliance with the conditions at \$38 million. During the same period, the company developed a belief that it would be beneficial to proactively examine project retirement as an alternative to re-licensing. It had become increasingly clear that if the project had become uneconomical due to the expected requirement of fish ladders and future operation under strict minimum flows, project retirement including dam and facility removal might be the most prudent business decision. It was furthermore decided that the evaluation of project removal alternatives should be conducted in close consultation with all interested stakeholders, including FERC process interveners, agencies, groups and interested public.

Simultaneously, in early 1996 the Yakama Nation, CRITFC and American Rivers, et. al., requested that PacifiCorp remove the project to restore anadromous fish and natural flow conditions in the White Salmon River. Interveners WA Department of Ecology (DOE), WA Department of Fish and Wildlife (DFW), US Fish and Wildlife Service (FWS), US Forest Service (USFS) and US National Marine Fisheries Service (NMFS) supported investigation of dam removal. In response, on January 29, 1997 PacifiCorp requested a temporary abeyance of the FERC re-licensing process to allow time to investigate the feasibility of several dam removal options in collaboration with the interveners and other interested entities / individuals.

The consultation process involving discussion of dam removal alternatives between the company and interested parties thereby began. In March 1997, R.W Beck, an independent engineering firm hired by PacifiCorp, prepared an initial engineering suitability and cost estimate for several different project

removal alternatives. (Add something about where this led to, what it accomplished). In May of 1998, R.W. Beck issued a detailed summary report entitled "Condit Hydroelectric Project Removal -- Summary Report, Engineering Considerations" that was a summary of the efforts of several firms investigating the technical feasibility of the removal of the projects structural facilities and reservoir sediments using natural river processes. The basis of the preferred method involved blasting a tunnel through the base of the dam followed by rapid draining of the reservoir and an estimated 1.57 million cubic yards of sediment currently deposited upstream of the dam. The proposal went on to describe the process of then removing the dam using conventional quarrying techniques after reservoir draw down. The Beck report detailed a preferred method for project decommissioning, costs and a proposed schedule for dam removal. The report, however, did not constitute any sort of agreement to remove the dam.

Shortly after release of the Beck engineering report in May of 1998, the parties involved in the settlement negotiations reached an agreement on dam removal using the option described in the report. All involved parties came to the agreement that "the removal plan was technically, legally, biologically and economically feasible".

The Agreement

The PacifiCorp Settlement Agreement to remove the Condit hydroelectric facility was signed by PacifiCorp and involved parties on September 22, 1999 in Portland, Oregon.

At its heart, the terms of the 1999 PacifiCorp Settlement Agreement are simple. The agreement specifies that PacifiCorp will finance and implement the removal of Condit Dam and certain other project facilities, in accordance with a specific methodology, schedule, costs, and assumption of ability to acquire all needed permits.

- Removal Method -

The Settlement Agreement defined a removal method that is summarized in the "Removal Plan Summary" document, (attachment to the October 1999 amendment application). The Settlement Agreement dam removal process consists of the following essential elements:

- The first stage of the planned decommissioning is excavation of a 12 foot high by 18-foot wide tunnel at the base of the dam for rapid release of water and sediment. This size was calculated to pass a flow of 10,000 cfs upon final blasting (opening) of the tunnel, and to result in reservoir outflow velocities capable of mobilizing the sediment for transport out of the reservoir. Subsequent to opening of the tunnel, an estimated 1.XX cubic yards of sediment will be flushed from the reservoir in an estimated X hour time period, and rapidly carried downstream to the Bonneville pool where X% would be deposited in deep pool sections of the lower White Salmon and Columbia rivers. This work was scheduled for fall of 2006 under Exhibit C of the amendment application.
- Beginning in late fall of 2006 and extending one year to fall of 2007, activity would include dismantling the dam using drilling and explosives and a variety of hauling techniques. Quarrying of concrete composing the upper levels of the dam would result in removal of concrete blocks sized 10 feet high by 4 feet deep, by 6 feet wide. The blocks would be removed from the canyon using highline yarders for delivery to trucks and transport to a recycling or spoils disposal area. As dam excavation recedes downward, the concrete removal method will shift to conventional blasting to rubble-size particles and removal using front-end loaders and dump trucks. An access road to the lower portion of the dam will be needed to complete this work.
- In addition to removal of the concrete dam, other dam structures such as Obermeyer crest spillway gates, and other spillway and intake gates will be removed, disposed or recycled during this same one-year time frame.
- The cofferdams used during dam construction will also be completely removed from the river canyon

upstream of the dam. For removal, an access and haul road will be built to access the area just upstream of the dam. The cofferdams were constructed using loose rock filled wooden crib structures, although it is possible that some cement was used to backfill one of the structures. The cofferdams will be removed using blasting, loading and truck transport out of the canyon.

- The steel forebay (surge tank) structure and concrete foundation will be completely removed to eliminate future public safety hazards. Conventional blasting will be used to demolish the concrete foundation. Concrete and steel will be hauled to the disposal area for burial, or recycled.
- Finally, the 13.5-foot diameter by 5,100 foot long wood stave pipeline and 650 foot long wood and steel penstocks will be dismantled along with their concrete foundations. All resultant material will be disposed of or recycled.

The removal plan summary document goes on to describe the quantities of material that will be generated during the decommissioning process. Estimated quantities of some of these materials are listed below:

Concrete -	-	-	45,000 cubic yards (fractured volume)
Wood Pipe Staves -	-	-	6,000 cubic yards (stacked)
Steel -	-	-	400 tons
Woody Debris from Reservoir -			unknown

The Settlement Plan and license amendment application propose an aggressive schedule for project removal within one year. Figure 1 of the license amendment provides a sequence and timing of major tasks. Criteria used to develop the proposed timeline include the following elements: a) work that will affect water quality and quantity should be performed after October 1; b) the coffer dams should be removed prior to May 1 to allow fish passage; c) the excavation of the 12x18 foot drainage tunnel and removal of the low-level concrete from the old river channel should be done during low flows (July through November)

- PacifiCorp's Financial Commitment and Project Costs -

In signing the Settlement Agreement, PacifiCorp agreed to shoulder a maximum of \$17,150,000 (1999 dollars) to accomplish all phases of the project decommissioning. The Settlement explicitly states that should project costs exceed that mark, PacifiCorp has no responsibility to provide more than the stated amount. Project removal costs began accruing September 22, 1999 (the Settlement's effective date). Project removal costs are partitioned in several categories that include the following:

1. \$13,650,000 for project planning, engineering, design, mobilization, demobilization, construction, and deconstruction costs;
2. \$2,000,000 for the technical, engineering and legal costs incurred by the company in obtaining any permits, along with technical, engineering, design, mobilization, demobilization construction, deconstruction and legal costs associated with implementing and complying with permitting and mitigation measures required by any permits;
3. \$1,000,000 which PacifiCorp will contribute to the Yakama Nation for the enhancement, supplementation and conservation of fishery resources in the White Salmon River basin; and
4. \$500,000 which PacifiCorp shall contribute for the enhancement maintenance other use of the Underwood In Lieu Site locate at Underwood, WA, or other in lieu sites managed by the "Tribes" (see complete definition on Page 6 of the Condit Hydro project Settlement Agreement).

- Other Features of the Agreement -

In addition to the terms described above, several other terms of the Settlement are important to understand.

First, PacifiCorp incorporated a comprehensive list reasons for withdrawal from the Settlement within Section 5 of the agreement. Principally, the agreement provides the company and other signatories an opportunity to opt-out of the agreement in the event: a) an amended license was not issued by FERC within a specified time; b) the amended license is not consistent with the Settlement terms; c) if it is impossible to obtain a permit, or if permit terms are materially inconsistent with the Settlement; d) there is an inability to obtain a needed easement, right-of-way or other interest in property; e) if it is impossible to obtain the necessary contracts; f) if there is a legal injunction prohibiting the work; g) there is an inability to confirm the In Lieu Site Enhancement Agreement; and finally, H) if the company is unable to obtain a release of claims from the U.S in its capacity as trustee of the tribes.

Second, the Settlement specifies that the removal plan will be initiated no later than August 1, 2006, the company will cease generating power no later than October 1, 2006, and will commence project removal during October 2006 or earlier. Note that the seven year period between signing of the Settlement and the proposed removal date was established to allow the company to generate funds to help off-set the cost of decommissioning. The opportunity to begin decommissioning at an earlier date was, however, incorporated into Section 4.4 of the Settlement. This provision was added in understanding that identification of additional funds might significantly reduce PacifiCorp's financial contribution to the project removal, and thereby allow earlier decommissioning.

Status of Settlement Agreement Process:

On October 21, 1999, one month after signing of the Settlement Agreement to remove Condit Dam, PacifiCorp filed the voluntary settlement agreement as the basis for amending its FERC license ("Application for Amendment of License and for Approval of Offer of Settlement") with the Secretary of FERC. In this application, the company requested FERC to amend the existing license to: a) extend the term of license to October 1, 2006; and b) condition the license with the terms specified by the September 22, 1999 Settlement Agreement. In addition to these amendments, the company asked FERC to approve the Settlement without any modifications or conditions, and to prepare a supplement to the 1996 FEIS based on the newly proposed decommissioning actions set forth in the Settlement.

In a declaratory order issued December 21, 2001 the FERC determined that the amendment / settlement application was in essence an application to surrender the existing license with a future effectiveness date. Furthermore, FERC noted that there was no statutory reason for not extending the re-license application process while it further considered the Settlement Agreement alternative proposed by PacifiCorp.

In June of 2002, the Commission released the Final Supplemental Final Environmental Impact Statement (FSFEIS) requested by PacifiCorp in the amendment application. The FSFEIS analyzed the dam removal plan set forth in the Settlement Agreement. The FERC had earlier provided an opportunity for interested parties to comment on the DSFEIS and dam removal alternative. The Final Supplemental Final Environmental Impact Statement, recommending that the Commission grant project surrender under terms of the Settlement Agreement as requested by PacifiCorp and involved parties, with some slight modifications.

“ . . . [W]e recommend that the Commission grant project surrender under the Settlement Agreement with modifications alternative, because the one-year removal of the Condit Project would provide numerous fishery, wildlife, recreational, and aesthetics benefits expeditiously and in a cost-effective manner.” (p. xxx) FERC Final Supplemental Final Environmental Impact Statement, Condit Hydroelectric Project (FERC/FSFEIS-0103), June 2002

Since issuance of the June 2002 FSFEIS and the recommendation of FERC staff for adoption of the conditional Settlement Agreement option, no final action has been taken on PacifiCorp's amendment application by FERC Commissioners. (Although FERC staff is responsible for issuance of action recommendations, only FERC commissioners can take formal action on re-licensing applications or amendments). This delay in action was requested by PacifiCorp (under a (date) abeyance request intended to give the company additional time to apply for and receive necessary permits needed to complete the

decommissioning.

During this current abeyance phase, the principle activities performed by the company include refinement of engineering designs, acquisition of right-of-way and land-use permissions and the many phases of permitting.

- Engineering Tasks -

- Acquisition of Right-of-Ways and Easements -

- Permitting Tasks -

Work to meet the requirements of the Washington State Environmental Policy Act (SEPA) process is currently underway. The purpose of this permit is to The company is currently working toward ...

PacifiCorp is also working toward attainment of the Washington State Department of Ecology (DOE) Section 401 Clean Water Act certification process.