

Four Dam Pool Q&A

From time to time customers ask for information regarding the Four Dam Pool and what it has to do with Copper Valley Electric Association. The purpose of this article is to provide answers to some of the more frequently asked questions about this organization.

Q: What is the Four Dam Pool and what does it mean to CVEA?

A: The Four Dam Pool Power Agency (FDPPA) owns the Solomon Gulch Hydroelectric Project. Solomon Gulch provides approximately 60 percent of CVEA's annual generating requirement.

Q: Why is it called it the Four Dam Pool?

A: The Four Dam Pool is composed of five utilities that purchase power from four hydro electric projects. The pool portion of the name has to do with how costs and risks are shared and charged back to the utilities. All costs of operation and maintenance are pooled together and charged back to the five utilities at a postage stamp rate.

Q: What are the four projects and who are communities they serve?

A: The projects and communities they serve are as follows:

Solomon Gulch—Valdez and Glennallen.

Terror Lake—Kodiak Island.

Swan Lake—Ketchikan.

Tyee Lake—Wrangell and Petersburg.

Q: Why was the Four Dam Pool created?

A: The four projects were built in the early 1980s. In every case the projects

were fraught with cost overruns. The state and the utilities saw an opportunity for the state to make a capital investment and to enter into a contract with the utilities, which would enjoy the benefits of economies of scale while sharing costs and mitigating risks of ownership.

Q: When was the Four Dam Pool created?

A: The Four Dam Pool was officially created on October 28, 1985, with the signing of the long-term power sales agreement between the five purchasing utilities and the Alaska Power Authority—later renamed the Alaska Energy Authority. The long-term power sales agreement is a 45-year contract that sets forth the terms and conditions under which the utilities purchase power from the projects.

Q: What is the cost of Four Dam Pool power?

A: The cost per kilowatt-hour charged to each purchaser of Four Dam Pool power is 6.8 cents per kilowatt-hour, including operations and maintenance costs, fixed costs for

debt service, renewal and replacement costs, and a reserve component to pay for damage or loss caused by natural or uninsured events. The 6.8 cents wholesale rate has remained unchanged since February 1998.

Q: Do the Four Dam Pool communities receive Power Cost Equalization—the state subsidy program?

A: None of the Four Dam Pool communities receive Power Cost Equalization (PCE). As part of the 1984 legislation creating the PCE program any utility that did not generate more than 75 percent of its annual electric requirement from diesel engines in 1984 was not eligible for the PCE program.

Q: Are all of the projects similar?

A: While the projects have many similarities, they are also different in many ways. Some statistics are below.

Q: Has CVEA benefited from membership in the Four Dam Pool?

A: As the smallest of the four hydro

	Solomon Gulch	Swan Lake	Terror Lake	Tyee Lake
Access	Road	Boat/Plane	Plane	Boat/Plane
Generator Megawatts	12	22.5	22.5	22.5
Water Storage (acre feet)	31,500	86,000	112,000	52,400
Transmission miles	106	30	31	70
Submarine cable miles	none	none	none	11
Penstock	2 @ 3,800 ft.	267 ft.	3,100 ft.	1,350 ft.
Tunnel	none	1,950 ft.	26,690 ft.	8,300 ft.
Max annual energy (MWH)	50,000	80,000	120,000	130,000



The Four Dam Pool, clockwise, from top left: Solomon Gulch; Swan Lake; Terror Lake; and Tye Lake. Photos Courtesy of FDPPA.

projects, CVEA has been a beneficiary of the cost pooling arrangement. The price CVEA has paid the Four Dam Pool for power produced at Solomon Gulch is less than the price it would have been had CVEA not joined the Four Dam Pool.

Q: Solomon Gulch was built by CVEA and sold to the Alaska Power Authority in 1985. Later, the Authority sold the projects back to the Four Dam Pool Power Agency. Please explain that.

A: In the mid- to late 1990s the state signaled an interest in privatizing certain energy assets, including the Four Dam Pool. The five purchasing utilities believed the assets should be owned by the communities they were built to serve. In early 2000, after months of careful analysis, the utilities offered to purchase the four projects back from the state for \$73 million. The terms of the deal included retaining

the 1985 Power Sales Agreement and for the utilities to assume all risks of ownership. The state financed the sale with a 6.5-percent loan. The sale proceeds went into the Power Cost Equalization Endowment Fund. The transaction closed on January 31, 2002.

Q: In 2006, Kodiak Electric made a proposal to the Four Dam Pool to break up the pool. What does that mean to CVEA?

A: In 1999, when the utilities were talking about buying the Four Dam Pool projects back from the state, the economic analysis said the FDPPA would have enough cash to retire the acquisition debt in 2013, which would make breakup of the pool possible. Kodiak proposes to accelerate that time frame by offering \$38 million of new money to help finance an earlier break up. Under the proposed scenario, Kodiak and Copper Valley would own their respective projects

and the three Southeast utilities would form a two-dam pool.

This proposal is a little more difficult for CVEA to entertain than the other Four Dam Pool members for two reasons: First, we have the transmission line avalanche risk to think about. Second, the Solomon Gulch project has a smaller annual output to spread our costs. If the proposal goes forward we won't have to pay debt service as part of our power rate, but we will have to absorb all of the risk on our own, and we won't have the pool to help share that risk.

Q: Where is this all going?

A: CVEA and the other utilities are in the early stages of evaluating the proposal. While this is an interesting opportunity, there is a lot of work to be done to make it happen. Stay tuned to future issues of Ruralite for more information on this proposed transaction. ■