

POWER FROM THE TRUCKEE RIVER

Power development of the Truckee River followed the Folsom Powerhouse by only a few years. However, here the turbines are still spinning and the generators humming. Although no longer capable, by themselves, of lighting the streets of Reno, the small powerhouses provided ample electric service to northwestern Nevada at a time when electric service was still unavailable in many parts of the "more civilized" East.

Construction for Farad, the first hydroelectric power plant on the eastern slopes of the Sierra was begun on January 2, 1900, by the Truckee River General Electric Company. Located at Floristan, California, about 18 miles above Reno on the north bank of the Truckee River, it was built, not for the future casinos of the "Biggest Little City in the World," but rather to pump water from the gold and silver mines of the Comstock Lode in Virginia City. Current first flowed over the 33-mile, 22,000 volt transmission line on September 29, 1900, with regular service commencing on October 20, 1900.

Power is developed from a head of 84 feet which drops the water through two McCormick type turbines with 27-inch wheels. These in turn drive two 750-kw Westinghouse generators.

The 84-foot head is obtained from a two-inch thick native pine flume which draws water from a small diversion dam a mile and a half upstream. Sacramento Valley and Bay Area motorists on their pilgrimages to the Nevada attractions parallel the flume as it follows the course of the Truckee River, all the while clinging tenaciously to the canyon wall.

Located downstream from the Farad plant and three miles upstream of Verdi, the Truckee River General Electric Company opened the Fleish powerhouse on the south side of the river in 1905. An 8-foot diameter steel penstock connected this powerhouse with its delivery flume. Here a 3000 hp Victor turbine drove a 2000 kw generator which also helped supply the ever increasing demands for electric power in Virginia City.

During this period other firms built small hydroelectric plants along the Nevada portion of the Truckee River to feed power into the Reno area. With time, the individual companies merged into the Sierra Pacific Power Company which serves the area today.



Penstocks ready for placing at the Farad Powerhouse.

View in 1933, of Farad Powerhouse and penstocks.





Farad Powerhouse on the Truckee River

 **FARAD POWERHOUSE**

First Source of Electricity for Reno and the Comstock, Built 1899

The Farad Powerhouse is a historic landmark in Reno, Nevada. It was the first source of electricity for Reno and the Comstock, built in 1899. The powerhouse is a yellow building with a gabled roof and a large arched doorway. It is located on the Truckee River. The powerhouse is a historic landmark in Reno, Nevada. It was the first source of electricity for Reno and the Comstock, built in 1899. The powerhouse is a yellow building with a gabled roof and a large arched doorway. It is located on the Truckee River.

 

NVEnergy 



FARAD POWERHOUSE

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The Truckee River is an excellent source of hydroelectric power generation. There are four plants on the river, owned by Truckee Meadows Water Authority. In the early 1900s, the Truckee River hydroelectric plants were the sole source of electricity for Reno and Sparks.

The Farad plant is the oldest of the four plants. It was built in 1899 to provide electricity to the Comstock mines, and along the way, to Reno. The Farad plant produced 1,400

horsepower, and was the first hydroelectric plant on the east side of the Sierra.

The three working plants —Fleish, Verdi and Washoe— are downstream from here and produce an average of 6.7 megawatts of clean, renewable power annually, or enough to power approx. 3,500 households. Visit tmwa.com for more information on the hydroelectric plants.



The old wooden flumes seen throughout the Truckee River Canyon are each two miles long and carry water from a river diversion point to a hydroelectric plant, then return it to the river. Three miles downstream of here TMWA built a tunnel in 2014 to carry water to the Fleish hydro plant, replacing a section of the wood flume that was prone to rockslides.

The Tahoe-Pyramid Bikeway is a visionary project to follow the entire length of the Truckee River from Lake Tahoe to Pyramid Lake with a bike/hike route. The section from here to Floriston was made possible by the cooperation of our utility partners: NV Energy and Truckee Meadows Water Authority.

Please respect their land and their facilities.



A turbine from one of the working hydroelectric plants downstream from here. These sturdy turbines have been well maintained and are over 100 years old.

Tahoe-Pyramid Trail

Farad Powerhouse
End Flume
lat:39.41992,lon:-120.03165

Truckee River

Truckee River

Begin Flume to Farad Powerhouse
lat:39.39885,lon:-120.02327

Remnants of Flume Intake Structure
lat:39.39714,lon:-120.02407

Nevada Historical Marker
- Floriston (Bronco)

Floriston

Farad Flume & Powerhouse

CALIFORNIA
NEVADA

CALIFORNIA
NEVADA



Truckee River (Flows North to Reno, Nev)

Inlet Structure

Open Channel to Downstream Flume Inlet

Remnants of Diversion Dam and Inlet to Open Channel Above Farad Powerhouse



Truckee River

Truckee River

Farad Powerhouse
End Flume
lat: 39.41992, lon: -120.03165

10100

80

Purple Heart Trl
Dwight D. Eisenhower Hwy
Alan S. Hart Fwy
Alan S. Hart Fwy

Farad Powerhouse Aerial View



Flume Outlet to Open Channel

lat:39.47211,lon:-119.99399

Flume at CA/Nev State Line

lat:39.46323,lon:-120.00307

Pipeline Outlet to Flume

lat:39.46048,lon:-120.00550

Pipeline Inlet from Flume

lat:39.45754,lon:-120.00669

Flume Inlet from Open Channel

lat:39.45515,lon:-120.00710

Truckee River Dam & Inlet to Open Channel

lat:39.45267,lon:-120.00564

Upper Truckee River Diversion Dam To California/Nevada State Line

Alan S. Hart Fwy

Dwight D. Eisenhower Hwy

CALIFORNIA
NEVADA

CALIFORNIA
NEVADA

Truckee River

Deep Canyon

Truckee River

Truckee River

Truckee River



Verdi Hydroelectric Power Plant

lat:39.52385,lon:-119.98067

Pipeline Inlet from Open Channel

lat:39.52094,lon:-119.98762

Truckee River Dam & Inlet to Open Channel

lat:39.49300,lon:-119.99373

Flume Outlet to Open Channel

lat:39.48128,lon:-119.9920

Fleish Hydroelectric Power Plant

lat:39.48102,lon:-119.99275

Flume Inlet from Open Channel

lat:39.47211,lon:-119.99400

Flume Outlet to Open Channel

lat:39.46407,lon:-120.00255

Flume at CA/Nev State Line

lat:39.46323,lon:-120.00307

CA/NV State Line to Verdi

American Society of Civil Engineers
Sacramento Section

Local Historic Civil Engineering Landmark

Truckee River Power Plants

References

Hydroelectric Power Plants - Truckee Meadows Water Authority	History of the Truckee Area by Guy Coates
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Farad Powerhouse HMDB.org	Explore the Verdi hydroelectric plant's place in northern Nevada's history Hydro Review
TMWA'S HYDROELECTRIC POWER PLANTS Truckee Meadows Water Authority	TMWA's Hundred-Year-Old Hydro Plants Can Eliminate 15,000 Metric Tons of CO2 Emissions Every Year Truckee Meadows Water Authority