

BEFORE THE DIVISION OF WATER RESOURCES  
DEPARTMENT OF PUBLIC WORKS  
STATE OF CALIFORNIA

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In the Matter of Application 6383 of the Pacific Gas and  
Electric Company to appropriate from Alder Creek Trib-  
utary to the South Fork of the American River in  
El Dorado County for Power Purposes

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DECISION A 6383 D 258

Decided - *May 28, 1930*

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APPEARANCES AT HEARING HELD AT SACRAMENTO NOVEMBER 27, 1929.

For Applicant

Pacific Gas and Electric Company

Thomas J. Straub, Atty.

Geo. A. Hunt, Engineer

For Protestants

Eva Randall, et al.

Richard tum Suden

C. J. Olson

Frank L. Murphy

Albert H. Rodin

In propria persona

Axel E. Erickson

Albert H. Rodin

EXAMINER: Harold Conkling, Deputy in Charge of Water Rights.

## O P I N I O N

### GENERAL FEATURES OF APPLICATION

Under Application 6383, filed July 23, 1929, it is proposed to appropriate 15 cubic feet per second from Alder Creek, a tributary of the South Fork of the American River from about October 1st to about June 15th of each season. The point of proposed diversion is located within the NW $\frac{1}{4}$  of SW $\frac{1}{4}$  of Section 36, T 11 N, R 14 E, M.D.B. & M. about 1200 feet above the gaging station of the United States Geological Survey. The principal purpose of the application as set forth therein is to rehabilitate the Company's old rights on Alder Creek and to secure the delivery into El Dorado canal, at the intake of the Alder Creek siphon, of a supply of relatively warm water to minimize the prevalent ice troubles during the winter months, and to replace part of the water that must be wasted from the main canal above this point to free the conduit of ice and snow. It is not the applicant's intention to appropriate any of the low water or summer flow of the stream. The generation of power from such water as will be diverted is incidental to the other uses specified above. The water after passing through the El Dorado power plant will be returned to the South Fork of the American River at the tail race of said power plant within the NE $\frac{1}{4}$  of NE $\frac{1}{4}$  of Section 22, T 11 N, R 12 E, M.D.B. & M.

The application was protested by Eva Randall, A. B. Randall, Charles Evans, Nettie E. Evans, R. J. Campbell, P. M. Fisher, Jr., J. B. Schafhirt, Elsie Ostrom, James S. Dean, J. R. Hughes, Charlotte A. Cross, H. E. Aldrich, G. A. Gordon, Nettie Marden Wilbur, Allan C.

Bradley, Edwin R. Pickett, Margaret S. Meir, Mrs. W. L. Laughland, Alice C. Busick, Mrs. Helen B. Oschner, M. C. Bates, Fred J. Johns, Russel Macauley, Mrs. Henry Martin, Mrs. Ethel M. May, Blanche M. Sigwart, T. J. Sigwart, Mrs. May A. Sanborn, John Greene, Maude B. Smith, Albert H. Rodin, Axel E. Erickson, C. J. Olson and Albert M. Martin.

#### PROTESTS

The protestants have cabin sites along the South Fork of the American River from the mouth of Alder Creek to Riverton. They claim riparian rights ( C. J. Olson also claims appropriative rights) and allege in effect that the proposed diversion under Application 6383, if approved, would interfere with their rights as it would result in taking from them the waters of Alder Creek to which they are entitled and upon which they depend largely for domestic and sanitary purposes and the aesthetic value which is contributed by running water to vacation resorts.

#### HEARING SET IN ACCORDANCE WITH SECTION 1a OF THE WATER COMMISSION ACT

Application 6383 of the Pacific Gas and Electric Company was completed in accordance with the Water Commission Act and the requirements of the Rules and Regulations of the Division of Water Resources and being protested was set for a public hearing in accordance with Section 1a of the Water Commission Act on November 27, 1929 at 10:00 o'clock A.M. in Room 401 Public Works Building, Sacramento. Of this hearing applicants and protestants were duly notified.

## PHYSIOGRAPHY AND HYDROGRAPHY

Alder Creek, the source named in this application, is a tributary of the South Fork of American River. It heads at a point about 9 miles southeasterly of Kyburz and flows in a general northwesterly direction about 11 miles to a junction with South Fork about 4-1/2 miles below Kyburz. It has a gross watershed area of approximately 23.8 square miles of which 22.9 square miles lies above and tributary to the stream at the location of a gaging station on Alder Creek maintained by the U. S. G. S. since 1922.

The Pacific Gas and Electric Company in addition to the present filing has another filing (Application 1441) upon which a permit has been issued allowing the appropriation of 25,000 acre feet per annum by storage throughout the year at a point on Alder Creek above this gaging station and to which there are 17.2 square miles of watershed tributary. All estimates of watershed areas and distances are scaled from the topographic maps of the U.S.G.S.

Based upon a comparison of flow with that of the Fair Oaks gaging station of the U. S. G. S. which has a record of some twenty-five years it is estimated that the normal annual yield of the Alder Creek watershed above the gaging station will approximate that of the years 1923 and 1925 or close around 30,000 acre feet.

The watershed tributary to the stream above the storage dam proposed in Application 1441 is approximately 75 per cent of the total above the gaging station and therefore in a normal year there will be little, if any, surplus from the shed above the storage dam after satisfying this appropriation under Application 1441.

In order to form some estimate of the remaining waters available to cleanse the stream channel of the South Fork in the section occupied by protestants a comparison is made with the Plum Creek watershed, tributary also to the South Fork of American River from South and almost immediately adjacent to Alder Creek on the West. The two sheds are strictly comparable except that the Plum Creek shed lies slightly lower and it is noted by observation of the U. S. G. S. records that the Plum Creek shed yields per square mile approximately 80 per cent of the per square mile yield of the Alder Creek shed as a whole. The yield per square mile is perhaps about the same as the per square mile yield of that portion of the Alder Creek shed below the proposed storage dam site and above the Alder Creek gaging station. If this be a fact, and it can not be far wrong, then this 5.7 square miles would yield approximately 20 per cent of the flow of Alder Creek measured at the gaging station.

There are also some 10.5 square miles of drainage area on the South Fork of American River tributary between the intake of El Dorado Canal and the confluence of Alder Creek. This lies somewhat lower than the Plum and lower Alder Creek sheds and perhaps yields per square mile 80 per cent what the Plum Creek shed yields. Upon this assumption it could yield approximately 30 per cent of that measured at the Alder Creek gaging station.

From the above a conclusion is reached that regardless of any and all diversions possible by Pacific Gas and Electric Company at intake

of the El Dorado Canal or for filling Alder Creek Storage Reservoir there will flow in South Fork of American River immediately below the confluence of Alder Creek a minimum of close around one half the flow at the Alder Creek gaging station, or according to the records of the U. S. G. S. 0.4 second foot in October, 3 second feet in November, 7 second feet in December, 7 second feet in January, 20 second feet in February and 37 second feet in March with even greater quantities in April, May and June. If this application (6383) is allowed and Pacific Gas and Electric Company diverts accordingly, and assuming that all flow above the intake of El Dorado Canal were diverted at that point there would still remain flowing in South Fork of American River below the confluence of Alder Creek on the average approximately 0.2 second foot in October, 2 second feet in November, 4 second feet in December and January, 12 second feet in February, 20 second feet in March, and even greater quantities during the months of April, May and June.

Pacific Gas and Electric Company by virtue of appropriations initiated before this office was instituted and applications filed prior to Application 6383 can assert with good effect a claim of right to divert 320 cubic feet per second from the natural flow of South Fork of American River at the intake of El Dorado Canal, and also the right to store some 59,400 acre feet annually, and a study of the hydrographs of South Fork of American River for the period of record at the Kyburz Station of the U. S. G. S. indicates that normally there will be no waste past that point prior to December 1st. We are forced then to the conclusion that if this application (6383) is allowed the protestants and other claimants

on South Fork of American River immediately below the confluence of Alder Creek will have available normally for their needs during October and November only the quantities of water set out in the last preceding paragraph.

#### GENERAL DISCUSSION

Testimony presented at the hearing indicated that there are two or three small diversions from Alder Creek below the applicant's proposed point of diversion (see transcript page 10) amount unknown. On the South Fork of the American River below its confluence with Alder Creek and above Riverton, for a distance of about four miles there are numerous cabin sites which are owned by the protestants. Their cabin sites are generally occupied during the summer months and occasionally during the fall and winter months.

A number of the protestants obtain their supply from springs or rivulets but at times are dependent upon the waters of the South Fork of the American River for their supply as the springs fail during the latter part of the summer and early fall and freeze during the winter. The supply from the South Fork which is used for domestic purposes is either dipped out of the river by buckets or is obtained by melting cakes of ice depending upon the season of the year. At Whitehall water has been pumped out of the river to supply about 125 guests.

Although the use of water has been confined principally to the summer months it appears that this recreational center is becoming more popular during the fall and winter months on account of its ready accessibility, made so by the improvement of the State Highway, and the opinion

was expressed that if a sufficient supply of water were available it would become still more popular and winter sports would attract many during that season.

Mr. Randall, one of the protestants testified that with the exception of a few weeks he had resided continuously at Phillips, which is just above Riverton, and until the spring freshets came the water for domestic purposes was obtained by melting cakes of ice taken from the river.

The testimony indicated that from January on there has been considerable water in the South Fork of the American River but during October, November and December, there are times when the flow is so little that fish die and the water becomes stagnant and slimy and is unfit for human consumption. In the winter the stream often becomes muddy due to water spilling from the Alder Creek siphon. It was Mr. Randall's opinion that in order to remedy this condition there should be at all times a flow of not less than five cubic feet per second in the river.

It appears that since the Pacific Gas and Electric Company constructed its dam on the South Fork of the American River at the El Dorado Canal intake people have been compelled to move out of the canyon during the late summer on account of the stagnant water and unsanitary condition of the river. Riverton, once a fairly successful resort, is practically abandoned. Kyburz on the other hand which is on the South Fork of the American River above the intake of the El Dorado Canal is very popular due to the abundance of water at that point.

### CONCLUSION

In view of the above statement of facts it is felt that enough water should be allowed to flow past the summer home sites from Riverton to Kyburz to insure to the owners a stream which is free from stagnation. The main highway borders along the South Fork of the American River and to allow the stream to become stagnant and highly polluted would be derogatory to the interests of the State at large.

From the records of stream flow of Alder Creek and the estimate of the amount of water available below the intake of the El Dorado Canal ~~intake~~ and below the proposed dam of the Pacific Gas and Electric Company on Alder Creek it appears that during the months of October and November of a year of normal runoff, there is not sufficient flow to justify further diversions from Alder Creek, but from about December 1st to about June 15th of each season water is available for appropriation over and above the amount necessary to keep the river free from stagnation.

The purpose to which the applicant proposes to use the water is beneficial and it is the opinion of this office that Application 6383 should be approved, the period of diversion, however, being limited to the season from about December 1st to about June 15th.

### ORDER

Application 6383 for a permit to appropriate water having been filed with the Division of Water Resources as above stated, protests having been received, a public hearing having been held and the Division of Water Resources now being fully informed in the premises;

IT IS HEREBY ORDERED that the said Application 6383 be approved for an amount of water not to exceed 15 cubic feet per second to be diverted from about December 1st to about June 15th of each season and that a permit be granted to the applicant subject to such of the usual terms and conditions as may be appropriate.

WITNESS my hand and the seal of the Department of Public Works of the State of California this 28 day of *May*, 1930.

EDWARD HYATT, State Engineer

BY Harold Conkling  
Deputy

WES: SHT