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GRIGINAL

Decision No. 89956

BEFORE THE PUBLIC UTILITIES CONVISSION OF THE STATE OF CALIFORNIA

Paul Merschdorf, Daniel Rehkop, et al..

Complainants,

VS.

John B. Williams, owner Donner Lake Utility Company,

Defendant.

Case No. 10521 (Filed March 16, 1978)

Charles E. Luckhardt, Jr., Attorney at Law,
for Faul Merschdorf, Daniel Rehkop, Richard
Reese, Verlie Mehrkens, Mervin R. Bailey,
Neil Krough, Delmar O'Neal, Michael
Montgomery, James Thomas, Ralph Miller,
Rick Boyd, Ann Morse, Stephanie Wilson,
and Daniel Bowers, Complainants.

Thomas G. Redmon, Attorney at Law, for
Donner Lake Utility Company, defendant.

Frank D. Beardsley, for Messrs. Beardsley,
Christian, and Peters; and Patricia Sutton, for
Truckee-Donner Public Utility District;
intervenors.

Eugene M. Lill, for the Commission staff.

## <u>OPINION</u>

Complainants are 14 homeowners in the Biltz Tract of Donner Lake at Truckee. Defendant John B. Williams (Williams), a water corporation, is owner of Donner Lake Utility Company (the water system), an 880 customer water system which supplies water to many homes around Donner Lake, including those of complainants.

Complainants allege that the water system serving the Biltz Tract is old and run down and given to frequent and prolonged water outages and inordinate low water pressures. They claim Williams and his employees have treated them discourteously and have harassed them. They request the Commission to order Williams to upgrade in certain respects the water system serving the Biltz Tract, to hire competent employees to operate the system, and to pay reparations to customers in the Biltz Tract to compensate them for the water outages and low water pressures they have experienced. Williams admits to several of the outages and low pressure periods complained of. He alleges he is taking steps to upgrade the service affecting the Biltz Tract. He denies that either he or his employees have treated his customers discourteously or have harassed them. A hearing was held on the matter before Administrative Law Judge Pilling on August 8 and 9, 1978, at Truckee.

The water system has two service zones: the high level zone and the low level zone. The Biltz Tract, located in the high level service zone, is divided into 104 residential lots of which 47 are developed with occupied homes. The tract is located on a steep, forrested slope to the north of the east end of Donner Lake at an elevation of 6,200 feet. The water system's principal source of water are springs located about a mile to the west of the Biltz Tract up from the margin of the lake. (Other sources of water are available to the water system but are useable only by the low level service zone.) Water from the springs flows through a chlorination station into two collecting tanks where it is either diverted to the lower level service zone or is pumped up from the collecting tanks to two 50,000-gallon storage tanks located at an elevation

of 6,440 feet for use exclusively to service customers in the high level service zone. The on-off switch of the pump is manually operated. By gravity flow the water from the two storage tanks is transmitted in a 6-inch main to customers in several subdivisions and finally to the Biltz Tract distribution system which is composed principally of 2-inch pipe. The transmission main reaches its minimum elevation of 5,950 feet (giving water pressure of 130 psi) just before it rises to an elevation of 6,200 feet at the Biltz Tract. The Biltz Tract distribution system built in 1951 has standpipes but no fire hydrants. Service in the tract is unmetered, each customer paying a flat rate of \$96 per year. The maximum day water consumption for both service zones combined is 400,000 gallons. The metered spring flows during the summer months usually range from 300,000 to 350,000 gallons per day during normal times while the other source, usable only by the low level service zone, provides up to 75,000 gallons on a heavy demand day. The Biltz Tract and one small area on the south shore of Donner Lake are the only two designated low pressure areas in the water system. There are several other tracts served by the water system which have 2-inch distribution mains. The utility grosses approximately \$92,000 annually from all its water services. During six months out of the year, the Donner Lake area is covered with deep snow.

Complainants testified variously that they suffered water outages in September 1977 for parts of five days; in October 1977 for parts of two days; in November 1977 for parts of four days; in December 1977 for parts of four days; and in January 1978 for parts of five days. In February 1978 they were all without water for seven consecutive days. The complainants testified of

their extreme discomfort in being without water, particularly during the seven consecutive waterless days in February 1978. Even after the water was turned on after an outage, the water was extremely turbid, full of sand and dirt, and unusable for a time. The complainants also complained of chronic low water pressure. During the month before the filing of the complaint, complainants at the higher elevations in the Biltz Tract experienced average pressure during non-peak periods of between 5 and 15 psi; and during times of heavy use, the pressure averaged between O and 5 psi. One complainant located at the highest elevation in the tract stated that because of the constantly low water pressure his upstairs bathroom fixtures would not operate and that his washing machine, located one floor below, would take hours to fill up for each cycle. However, since the filing of the complaint, complainants have noticed a gradual but marked improvement in the water service. The complainant living at the highest elevation stated that since the filing of the complaint he recorded water pressures of no lower than 35 psi, except for one day when there was an outage; and in some cases, the pressure went as high as 55 psi, and that there is sufficient water in his upstairs plumbing to operate the upstairs bathroom fixtures. A pressure gauge was installed by one of the complainants which recorded water pressures at a service connection in the tract covering a period of twenty days during the latter part of June 1978 through the middle of July 1978. The earliest recordings showed a static pressure (recordings made at 3 a.m.) on each of five consecutive days to be approximately 27.5 psi and all subsequent recordings showed a static pressure to be 37.5 psi. Except for the earliest recorded five day period, minimum pressures of 25 psi or above during nonpeak periods and 20 psi or above during peak periods were maintained.

Complainants allege that the utility's employees are inept, citing several instances which seemed to complainants to demonstrate such ineptness. One complainant was without water for 21 days during the latter part of 1976 and the early part of 1977 due to the freezing of part of the distribution main and the electrical device used by Williams' employees in an effort to thaw the pipes shorted and charred some of the joists in her house. Complainants were especially critical of the length of time and the trial and error method used by the employees in trying to find the cause of the 7-day outage in February 1978 which was finally determined to be a blockage in the suction line between the collecting tanks and the pump, the last area checked for a malfunction. Complainants claim that erosion has exposed some of the distribution lines in the tract and that other parts of the lines freeze in the winter because they were laid at too shallow a depth.

The hearing officer declined to take testimony from complainant Bailey relative to an issue between the water system and Bailey which arose after the filing of the complaint relative to a water bill which was the subject of an informal complaint being handled by the Commission at the time of hearing.

The complainants want the Commission to order Williams to upgrade the system to meet the current standards set out in the Commission's General Order No. 103 to require Williams to:

- 1. Install a fire protection system in the Biltz Tract.
- Remove the present 2-inch pipe within the Biltz Tract and replace with 6-inch pipe.
- 3. Maintain normal operating pressures to all customers of not less than 40 psi at the service connection except during periods of hourly maximum demand and not less than 30 psi during periods of maximum hourly demand.

In addition, the complainants want Williams to be ordered to install a pump below the Biltz Tract and a holding tank above the Biltz Track to provide pressure and emergency water to the tract, in particular to the one residence which is at the highest elevation in the Biltz Tract. Complainants also want Williams to be ordered to establish a working agreement with the Truckee Public Utility District to buy service from the latter during future outages. Complainants also request that the Commission order Williams to conduct a hydraulic analysis and demand load study and to require that a spare pump be maintained in the present pump house in addition to the two working pumps which Williams intends to install. Complainants claim that water pressures of 25 and 20 psi are unrealistically low for the Biltz Tract since the service mains to many houses run 20 to 30 feet up a steep slope from the service connection delivering water at the houses at less than those minimum pressures. (10 psi has 23 feet of head.) Complainants also request a one-time adjustment of the current rates of all Biltz Tract customers as partial compensation for the outages equal to \$1 a day for each of the 29 days in which various complainants variously suffered a water outage. Additionally, one complainant requests a \$30 rebate to compensate her for payment to a plumber to clean out silt from the water company side of the service connection. And the complainant Wilson who suffered a 21day outage due to freezing requests that we order Williams to pay her a rebate equal to \$20 per day of outage and recompense her for miscellaneous expenses in connection with the 21-day outage.

Complainants' request for a one-time adjustment of current rates of all Biltz Tract customers equal to \$1 a day for 29 days (\$20 per day for complainant Wilson) to compensate them

for their failure to receive water service for a part or all of 29 days will be considered as a prayer for reparation as provided by law (Pub. Util. Code Sec. 734). At 26 cents per day (annual \$96.00 rate divided by 365 days), each complainant would receive \$7.54 reparation for Williams' failure to provide adequate or any service.

Williams testified that in his opinion after his employees corrected the blockage causing the long February 1978 water outage and made certain other adjustments in the system the water service has been adequate. Williams blamed the 8-foot snow depth around the tanks and pumping station and the rugged terrain as the principal reason for the delay in locating the cause of the outage. To ensure continued adequate pressure for the future, Williams has employed a hydraulic engineering consultant to redesign the pump house at the collecting tanks. The consultant testified that he submitted designs to Williams which called for enlarging the pump house to accommodate two parallel pumps and a pressure gauge on the suction line to indicate the water level in the collecting tanks and whether the suction line is performing properly. The designs also called for a pressure gauge on the pipe on the storage tanks side of the pump to indicate the water level in the storage tanks. This pressure gauge would automatically turn on the pump or pumps if the water level in the storage tanks fell below the critical level. Williams testified that the consultant's designs were presently out for bid out that no satisfactory bid had as yet been accepted. Williams estimated that the proposed construction would cost around \$18,000. Concerning complainants' request that the water system place a storage tank and pump close to the Biltz Tract

and reconstruct the distribution system in the tract to conform to fire flow requirements, Williams estimated the cost to acquire property and of construction to be \$160,000. He considers the project to be unnecessary in view of his plans to redesign the pump house and install a water level sensing device to automatically switch the pumps on and off as needed. Since 1962 the water system's tariffs (Rule 2) have required it to maintain a minimum pressure in the Biltz Tract of no less than 25 psi during nonpeak use periods and 20 psi during periods of peak use.

Prior to 1975 the Commission's General Order No. 103 governing the operations of public utility water systems required normal minimum water pressures at the service connection of 25 psi except that during periods of hourly maximum demand the minimum pressure at the time of peak seasonal loads may be no less than 20 psi. Subsequent to a change in the General Order in 1975, the minimum pressures were raised to 40 psi and 30 psi, respectively. Also, prior to 1975 the General Order contained no requirement that the water system furnish water or facilities for public fire protection purposes but in 1975 the General Order was amended to include such a requirement. The fire protection standards promulgated by the Commission in 1975 in General Order No. 103 state at Section VIII.1.(a) in part as follows:

"Initial Construction, Extension, or Modification. In the initial construction, extension, or modification of a water system, any one of which is required to serve (a) a new applicant, or (b) a change in use, the facilities constructed, extended, or modified shall be designed to be capable of providing, for a sustained period of at least two hours [certain minimum flows for fire protection]."

Section I.l.a. of the General Order reads in part as follows:

"... The standards herein prescribed are intended as minimum standards applicable after adoption and continued full utilization of existing facilities is contemplated. Nothing contained in any of the rules herein promulgated shall be construed to require the replacement or abandonment prior to the expiration of economic utilization of facilities in use at the time of adoption of these rules unless the Commission, after hearing, shall enter an order directing the abandonment or replacement of particular facilities found to be inadequate for the rendition of proper public utility service."

#### Discussion

Williams should be ordered to proceed as rapidly as possible to implement his proposed plans outlined at the hearing to upgrade the high level service area water system. Mechanically speaking, the implementation of these plans will eliminate water outages and recurrent low water pressure experienced in the past by customers in the Biltz Tract and make redundant having a spare pump available in the pump house as well as the installation of an additional pump and storage tank located close to the Biltz Tract. One of the principal reasons for many of the water outages and low pressure periods was the failure of the pump to automatically maintain an adequate volume of water in the storage tanks. What with the installation of a workable automatic water level sensing device to turn on or off the pumps as needed an adequate volume of water will be maintained in the storage tanks to meet peak and nonpeak period needs. Moreover, the second pump intended to be installed in the pump house will not only help to fill the storage tanks more rapidly than can be accomplished with one pump, but will eliminate the necessity of a spare pump. The duration of the

water outage in February 1978 was excessively prolonged due to the failure of Williams' employees to immediately locate the area of the malfunction, namely, the area on the suction line side of the pump. Reference to a pressure gauge which Williams proposed to install on the suction line will expedite the determination of the area of future malfunctions, if any.

We see no reason at this time to order Williams to replace the 2-inch distribution mains within the Biltz Tract. The distribution system when built met water system standards of that day and it has not outlived its economic usefulness. Through giving greater attention to the water system's operation since the filing of the complaint, Williams has somewhat improved the quality of water service in the Biltz Tract. Additionally, implementation of Williams' proposed plans will insure that the water system is mechanically capable of maintaining appropriate minimum pressures of 30 and 20 psi. These improvements should dispel most of the ill will which has arisen between the complainants and Williams and his employees. However, Williams and his employees should give greater attention to the maintenance of adequate service to the Biltz Tract since many of the customers there are the first (and perhaps only) customers to experience low pressures and outages when they occur and the last to regain normal pressures. In addition. Williams and his employees should make greater efforts to keep the 2-inch distribution system in repair and free from freezing. The steep slopes in the Biltz Track make working on the water system difficult but this should be no reason to delay the prompt covering of mains exposed by earth slides, the taking of action to prevent recurrent freezing of distribution mains, and the making of other timely repairs.

### Findings

- 1. Complainants are homeowners in the Biltz Tract of Donner Lake at Truckee whose homes are served by Williams' gravity flow public utility water system built in 1951.
- 2. Complainants variously experienced water outages on parts of 22 days between September 1977 and February 1978 and for 7 full consecutive days during February 1978.
- 3. Immediately after most of the water outages, the water from complainants' taps was so turbid and dirty as to be unusable for an inordinate length of time.
- 4. During the month before the filing of the complaint, complainants at higher elevations in the Biltz Tract experienced average water pressures during nonpeak periods of between 5 and 15 psi and during times of heavy use between 0 and 15 psi.
- 5. The Biltz Tract is a designated low pressure area which, in accordance with Williams' Tariff Rule No. 2.B.2, requires him to maintain operating pressures in the Biltz Tract at no less than 25 psi during normal periods and 20 psi during hours of peak use.
- 6. The water outages and frequent abnormally low pressures in the Biltz Tract were the result of the utility allowing the reserve supply of water in the storage tanks to reach too low a level before manually turning on the pump.
- 7. The frequent water outages and periods of abnormally low pressure resulted in Williams' rendering less than adequate and efficient service to complainants and were in violation of his tariffs.
- 8. Williams and his employees have been unable to properly monitor the water system to insure that adequate minimum pressures are maintained at service connections of complainants' living in the upper reaches of the Biltz Tract.

- 9. Sometime between February and April 1978, Williams hired a consultant to submit plans for upgrading the service in the high level service zone to overcome the deficiencies in water service in the Biltz Tract.
  - 10. Plans submitted to Williams by the consultant call for:
    - (a) Installation of a parallel working pump in the pump house located between the collecting tanks and the storage tanks.
    - (b) Installation of a sensing device which automatically starts or stops the pumps as the case may be to maintain an adequate water level in in the storage tanks.
    - (c) Installation of a pressure gauge on the suction line between the collecting tanks and the pumphouse.
    - (d) Installation of a flow gauge.
- 11. Williams intends to have the water system modified in accordance with the consultant's plans.
- 12. The implementation of the consultant's plans is necessary for the furnishing and maintenance of adequate and efficient service to customers in the Biltz Tract.
- 13. The implementation of the consultant's plans will result in the system's furnishing and maintaining water pressures as designated for the Biltz Tract by Williams' tariff.
- 14. Williams' water system cannot presently maintain minimum water pressures in the Biltz Tract as required by the Commission's present General Order No. 103.
- 15. The implementation of the consultant's plans will make unnecessary (a) the installation of a tank and pump close to the Biltz Tract and (b) a connection between the high level zone system with the Truckee Public Utility District water system.

- 16. The 2-inch distribution mains in the Biltz Tract (a) when built met water system standards of that day, (b) have not outlived their economic usefulness, and (c) are capable of the rendition of adequate public utility water service.
- 17. No need has been shown for conducting a hydraulic analysis or a demand load study.
- 18. Complainants have requested reparation as provided by law.

#### Conclusions

- 1. Williams violated his tariff on 22 days between September 1977 and February 1978 and variously during the month before the filing of the complaint by failing to deliver water to complainants' service connections at or above the minimum pressures designated by his Tariff Rule No. 2.B.2.
- 2. Williams should be ordered to implement the plans as testified to by his consultant for upgrading the water system.
- 3. Reparation in the amount of \$7.54 is due to each complainant, interest to be deemed included.

# ORDER

#### IT IS ORDERED that:

- 1. John B. Williams (Williams), doing business as Donner Lake Utility Company, shall, before July 31, 1979, implement the plans for upgrading the high level water system as testified to at the hearing by witness Allen Ross to include the following:
  - a. Installation of parallel working pumps in the pump house located between the collecting tanks and the storage tanks.

- b. Installation of a sensing device which automatically starts and stops the pumps as the case may be to maintain an adequate water level in the storage tanks.
- c. Installation of a pressure gauge on the suction line between the collecting tanks and the pump house.
- d. Installation of a flow gauge.
- 2. Williams or Donner Lake Utility Company will file a monthly/report with the Commission no later than the first day of each and every month after the effective date of this decision setting forth in detail his progress in accomplishing or having accomplished the work set out in Ordering Paragraph 1.

3. Williams or Donner Lake Utility Company will pay \$7.54 reparation to each complainant, interest included.

4. The complaint in all other respects is denied. The effective date of this order shall be thirty days after the date hereof.

Dated at San Francisco FEBRUARY day of

1979-

, California, this 14th

Commissioner Leonard M. Grimes, Jr., being necessarily absent, did not participate.

Commissioners

Commissioner Richard D. Gravelle, being necessarily absent, did not participate in the disposition of this proceeding.