

ORIGINAL

Decision No. 86856

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

CITY OF TORRANCE
3031 Torrance Boulevard,
Torrance, CA 90503,

Complainant,

vs.

CALIFORNIA WATER SERVICE COMPANY
1720 North First Street,
San Jose, CA 95112,

Defendant.

Case No. 10140
(Filed July 14, 1976)

William G. Quale, Attorney at Law,
for complainant.
McCutchen, Doyle, Brown & Enersen,
by Crawford Greene, Attorney at
Law, for defendant.
Jasper Williams, Attorney at Law,
and Robert C. Durkin, for the
Commission staff.

O P I N I O N

The complainant alleges that on July 4, 1976 a fire occurred in a single-family dwelling in the city of Torrance, California. Units from the Torrance Fire Department responded promptly and connected a fire pumper to the fire hydrant located near the intersection of Calle Mayor and Via Monte D'Oro, the hydrant closest to the dwelling. The water flow available from that hydrant was inadequate for fire suppression purposes. An attempt was made to utilize another hydrant on Calle Mayor to the east of the fire, but the water flow available from that

hydrant was inadequate for fire suppression purposes. The volume of water available from each of the hydrants was approximately 100 to 150 gallons of water per minute. General Order No. 103 of the Public Utilities Commission, as modified April 15, 1975, requires a minimum flow of 1,000 gallons per minute for a lot density of three or more single-family residential units per acre, which rate would be applicable to the area in which the dwelling is located. The Insurance Service Office, as a result of its 1975 Torrance Municipal Survey, established a flow requirement for the Riviera section of the city of Torrance at 1,500 gallons per minute. Water service in the Riviera section of the city of Torrance, including the area affected, is supplied by the defendant. At the time the hydrants were needed a subterranean water main valve, which should have been open in order to supply adequate water flows for firefighters, had been closed.

The complainant requests that the Commission conduct an investigation to ascertain why the control valve was left closed; how such occurrences can be prevented in the future; whether the defendant has the capacity to deliver water at an adequate flow rate for fire suppression purposes throughout its entire service area in the city of Torrance; and if the defendant does not have such capacity, that it be ordered to take appropriate measures to obtain such capacity.

The defendant admits that there was a fire at the time and place alleged and that the Commission's General Order No. 103 requires a minimum flow of 1,000 gallons per minute for a lot density of three or more single-family residential units per acre, but contends that by reason of the provisions of paragraph I.1.a. of that General Order, denies that the rate of flow would be applicable to the area in which the single-family

dwelling referred to by the complainant is located. The defendant generally denies the other allegations in the complaint based upon lack of information and belief. The defendant states in its answer that inasmuch as the reduction in available flow referred to in the complaint has been corrected, that the complaint be dismissed.

A hearing was held in Los Angeles on November 22, 1976 before Examiner James D. Tante and the matter was submitted on that date.

The defendant's motion to dismiss the complaint was properly denied.

The parties stipulated that:

(1) Joseph F. Young, assistant utilities engineer for the Commission staff, be deemed to have been called, sworn, qualified as an expert hydraulic engineer, and testified that the staff report was prepared by him or under his immediate supervision.

(2) The said report may be received in evidence as Exhibit 1.

(3) The facts as set forth in Exhibit 1 are true except that the defendant stated that the second sentence of paragraph 3 on page 1 should be given slight, if any, probative value.

(4) The defendant will cooperate with the complainant city of Torrance in such periodic hydrant flow tests as the complainant may wish to conduct. As a guide to the complainant in determining which hydrants to test, the defendant will continue to notify the complainant promptly whenever a distribution main valve which affects fire hydrant flows is shut down and when it is reopened, and maintain written records of such closings and openings available for inspection by the complainant, and that an order may be made by the Commission to this effect and that it is not necessary for the Commission to make any further order concerning this matter at this time.

Exhibit 1, the Commission staff report, was received in evidence. The report states:

The Commission's General Order No. 103, "Rules Governing Water Service Including Minimum Standards for Design and Construction", was amended on April 15, 1975 by Decision No. 84334 to include Section VIII, "Fire Protection Standards". Section VIII sets standards of main sizing, minimum flows in a distribution system, fire hydrant agreements, and requirements for independent sources of supply. The portion of defendant's plant (mains, service lines, etc.) along Calle Mayor was built in 1932, except for 300 feet of asbestos-cement pipe installed in 1971. Section I. l.a. of General Order No. 103 states in part:

"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."

It therefore appears that Section VIII of the General Order No. 103 is not retroactively applicable to defendant's service along Calle Mayor.

Schedule No. HR-5 of defendant's tariff relates to water service rendered for public fire protection to a public authority and is applicable to the Hermosa-Redondo District. Defendant states that it owns the hydrants in its district. Special Condition 2 of this schedule states:

"Hydrants owned by the utility will be maintained by it. The utility will install and own the tee in the main, hydrant branch, valve, bury and hydrant. The public authority will pay for the relocation of any hydrants owned by the utility."

Special Condition 4 states:

"The utility will supply only such water at such pressure as may be available from time to time as a result of its normal operation of the system."

According to Battalion Chief R. R. Nanney and Captain D. H. Lamb of the Torrance Fire Department, flow tests were conducted on hydrants at 230 Calle Mayor (hydrant #1) and 340 Calle Mayor (hydrant #2). Results are shown in the following table:

<u>Hydrant</u>	<u>Observed Flow</u> (GPM)	<u>Static Pressure</u> (psig)	<u>Residual Pressure</u> (psig)	<u>Date of Test</u>
1*	Unable to read	75-80	0	7-5-76
2*	500	75-80	0	7-5-76
1*	100	80	55	7-6-76
2*	100	78	45	7-6-76
1*	500	75	60	7-7-76
2*	500	72	45	7-7-76
1**	1,360	80	17	7-8-76
2**	910	79	9	7-8-76

*Test utilized fire engine pump.

**Test utilized 4" pipe attached to hydrant port.

A sequence of hydrant flow tests was conducted shortly after the fire incident by defendant's personnel. The following table shows the reported results of defendant's tests:

<u>Hydrant</u>	<u>Observed Flow</u> (GPM)	<u>Residual Pressure</u> (psig)	<u>Date of Test</u>	
1	Unable to read	None	7-7-76	Valve at Monte D'Oro closed during test and before removing obstructing parts from valve at Via Los Miradores. This simulates conditions during fire incident.
2	Unable to read	None	7-7-76	
1	1,240	20	7-7-76	With valve at Via Monte D'Oro opened but before removing obstructing parts from valve at Via Los Miradores.
2	850	20	7-7-76	
1	750	20	7-8-76	Reconstruction of flows which would have been available if valve at Monte D'Oro were closed but valve at Via Los Miradores had not malfunctioned.
2	350	20	7-8-76	
1	1,470	20	7-8-76	After correction of both problems.
2	850	20	7-8-76	

On October 26, 1976 a staff engineer observed hydrant flow tests conducted by the Torrance Fire Department. These tests were conducted at the hydrants utilized during the fire incident:

<u>Hydrant</u>	<u>Observed Flow</u> (GPM)	<u>Residual Pressure</u> (psig)	<u>Static Pressure</u> (psig)
1	925	52	79
2	775	30	80

The Commission staff concluded that:

1. The valve located at Calle Mayor and Via Monte D'Oro was closed at some time prior to the fire incident.
2. Staff cannot determine when the valve at Via Los Miradores and Calle Mayor became inoperative.
3. The valve at Calle Mayor and Via Monte D'Oro was correctly turned on in a full counterclockwise position.
4. The defective valve at Calle Mayor and Via Los Miradores has been replaced and appears to be operating properly.
5. Periodic hydrant flow tests could probably have detected the restriction of flow caused by corrosion buildup in the malfunctioning valve.
6. Periodic hydrant flow tests would have detected an improper closure of a valve on a main at the time of the test. Tests would limit the longevity of an erroneous closure to the frequency of the test at worst.
7. Choice of the method of testing hydrants appears to be at the discretion of the applicable public fire protection agency.
8. Periodic checking of gate valves by defendant could reduce the chances of an improper closure or could, at worst, limit the longevity of an erroneous closure to the frequency of the inspection.
9. There appears to be sufficient water available for adequate fire protection in the Torrance area as well as the Hermosa-Redondo District.

The Commission finds that the stipulation entered into between the parties is proper, in the best interests of the parties, and approves the stipulation; and concludes that an order should be made pursuant to the stipulation as agreed to by the parties.

O R D E R

IT IS ORDERED that:

1. The California Water Service Company shall cooperate with the city of Torrance in periodic hydrant flow tests which the city of Torrance may wish to conduct.

2. As a guide to the city of Torrance in determining which fire hydrants to test, the California Water Service Company will continue to notify the city of Torrance promptly whenever a distribution main valve which affects fire hydrant flows is down and when it is reopened, and shall maintain written records of such closings and openings of such valves which will be available for inspection by the city of Torrance.

The effective date of this order shall be twenty days after the date hereof.

Dated at San Francisco, California,
this 11th day of JANUARY, 1977.

Robert Belmont
President
William Squares
Leonard Ross
Commissioners

Commissioner Vernon L. Sturgeon, being necessarily absent, did not participate in the disposition of this proceeding.