ALJ/WRS/cc

Decision 88 07 046 JUL 22 1988

ORIGINAL

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

RALPH H. WILSON,

Complainant,

vs.

PACIFIC GAS AND ELECTRIC COMPANY,

Defendant.

(U39E)

Mailed

JUL 22 1988

Case 87-08-021
(Filed August 11, 1987)

Ralph H. Wilson, for himself, and Messrs. Cooley, Godward, Castro, Huddleston, and Tatum, by Mark D. Skilling, Attorney at Law, for Ralph Wilson, complainant.
Susan Rockwell, Attorney at Law, for Pacific Gas and Electric Company, defendant.
F. Javier Plasencia, Attorney at Law, and Joseph McMahon, for the Commission Advisory and Compliance Division.

O P I N I O N

Complainant Ralph H. Wilson (Wilson) asks that the Commission charge Pacific Gas and Electric Company (PG&E) with gross negligence, with violating numerous rules of PG&E's standard practice and the Commission's General Order 112-D, and with serious willful misconduct in its dealings with Alioto's #8 Restaurant (Alioto's) at Fisherman's Wharf in San Francisco, between May 18 and June 10, 1987. The complaint involves the operation of a hot water heater at Alioto's. Wilson claims that the heater was a public safety hazard due to emissions of carbon monoxide (CO) and the potential for fire caused by its deteriorated condition. Wilson alleges that the CO level was hazardous to customers and employees of Alioto's, including users of the women's restroom since the heater is adjacent to it and fumes enter it. Wilson

further alleges that the heater could have exploded due to the lack of proper protective devices to relieve excessive pressure. Wilson was a gas serviceman for PG&E during the period of the alleged hazards.

Two days of hearings in this matter were held in San Francisco on January 5 and March 17, 1988. Wilson and PG&E serviceman Gregory P. McQuinn (McQuinn) testified in support of the complainant. Defendant PG&E presented the testimony of four employees, chief service operator Paul Valasco (Valasco), temporary gas supervisor Donald E. Jones (Jones), gas service supervisor Philip A. Scramaglia (Scramaglia), and gas serviceman Lorenzo Arjona (Arjona), who was a temporary gas service supervisor during the time period of the complaint. Associate Utilities Engineer Joseph D. McMahon (McMahon) testified for the Service and Safety Branch of the Commission Advisory and Compliance Division (CACD).

McQuinn testified that PG&E sent him to Alioto's on May 18, 1987 to investigate a reported gas leak. He detected the odor of aldehydes in the vicinity of the heater room. The significance of aldehydes is that when they are present in such an environment, carbon monoxide (CO) is also present, since both are products of combustion of the natural gas fuel used in the heater. Aldehydes can be easily detected without use of measuring equipment due to their peculiar odor, whereas CO is odorless. Aldehydes themselves are not hazardous, but the accompanying CO can be extremely hazardous to people depending on concentration level and length of exposure. Low levels of CO can be expected during normal operation of the heater and are not a hazard if the heater is properly vented. However, high levels of CO can result from incomplete combustion, which can be caused by inadequate air being available for combustion due to clogged air vents.

McQuinn did not inspect the heater during this visit. He suspected a gas leak and wanted to shut down the gas system to perform a leakage test. However, he was told by a representative

of Alioto's that such a shutdown would be impossible at that time since cooking for the restaurant was going on.

Following PG&E standard practices, McQuinn called his supervisor, Jones, to come out. When Jones arrived at Alioto's later that day, he inspected the heater, temporarily cleaned the air vents with a broom, and brushed loose metal particles from the burner area. He then tested for CO level. The initial test during startup of the heater indicated a level of less than .01 part per million (ppm). That level of CO is well within the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) standards that allow an average level of 50 ppm CO for eight hours daily exposure. Five minutes later Jones took another CO test which indicated no measureable amount. Jones indicated that the initial test was taken during the worst case condition of startup. During startup the combustion products do not vent properly until the air column in the vent gets hot and light and thereby rises thermally. Until that time, some of the combustion products spill into the room rather than going up the vent.

Jones then issued a call-back tag requiring Alioto's to steam-clean the air vents to thoroughly remove the buildup of oil and dirt. Jones explained that in the environment of restaurants where cooking oils are used, oil in the atmosphere can contribute to frequent clogging of the air vents. Oil deposits on the air vents, attracting dust and lint, which attracts more oil, dust, and lint, and eventually results in substantial clogging. Proper maintenance requires thorough cleaning of the air vents on a regular basis. Steam-cleaning is an effective means of removing oily deposits from the air vents.

Jones further testified that under PG&E standard practices the supervisor has authority to issue a call-back tag to allow the customer to correct such conditions at a later date, if no hazard exists.

Arjona testified that he sent McQuinn back to Alioto's the following week to check on whether the air vents had been steam-cleaned. If they had not been, McQuinn was instructed to call Arjona. McQuinn determined that the heater was in the same condition as on the earlier visit, and that in his opinion it was in such poor condition that it needed to be replaced. McQuinn called Arjona, who decided to not go out to Alioto's, but rather to issue a second call-back tag. McQuinn then contacted Frank Alioto in Alioto's office, who assured him that the problem would be corrected by Alioto's plumbing contractor.

On June 10, 1987 Arjona sent complainant Wilson to Alioto's to check the condition of the air vents pursuant to the second call-back tag.

Wilson testified that he found what he believed to be a hazardous condition due to the presence of aldehydes and accompanying CO. While Wilson had no means of measuring the amount of CO present, he believed that his experience with PG&E as a gas serviceman allowed him to determine whether a hazard existed by the degree of irritation to his eyes, lips, and nose. He also concluded that the heater needed to be replaced because the combustion chamber was burned out. Accordingly, it was his opinion that no further call-back tags should be issued and that instead the heater should be taken out of service until the condition was corrected. However, when Frank Alioto refused to allow him to disconnect the heater, Wilson called Arjona.

Arjona stated that he decided not to meet Wilson at Alioto's because Wilson seemed very agitated over the situation. Arjona instructed Wilson to leave Alioto's and attend to his other work duties. Wilson then called Valasco, at PG&E's dispatch office, to complain about the lack of action by PG&E at Alioto's. Wilson alleged that PG&E was afraid or reluctant to disconnect the heater because of Alioto's political clout.

Arjona then called Alioto's and set up an appointment for later that day. During the visit he was assured that the heater would be replaced that day.

Valasco testified that Alioto's would be treated the same as any other customer if a hazard existed, in which case the appliance or system would be taken out of service until the hazard was eliminated.

Jones disputed the testimony of Wilson and McQuinn regarding the combustion chamber, contending that this type of heater does not have a conventional combustion chamber. According to Jones, what Wilson and McQuinn refer to as a combustion chamber is actually a heat deflector shield that distributes the heat along the bottom of the water pressure vessel portion of the heater to heat the water more efficiently. Jones contends that the deterioration of the heat deflector shield was caused by lack of sufficient air supply due to clogging of the air vents in the past. According to Jones, the resulting incomplete combustion causes the flames to extend, contact the shield, and recirculate, as they search for air when insufficient air is available for proper combustion. Jones testified that even if the shield burned through, followed by the vessel base burning through, no fire hazard would exist since water would leak out of the vessel and extinguish the pilot light. Once the pilot light was extinguished, the gas valve would automatically close off the gas supply to the heater.

Jones further testified regarding Wilson's allegation that the heater lacked adequate protective devices for excessive water pressure. He explained that in this installation both the heater in question and the other heater at Alioto's are piped together and are protected from excessive pressure by a single pressure relief valve, which is common for this type of commercial installation. The pressure relief valve opens if excessive

pressure, over 150 pounds per square inch, builds up due to the water overheating. It recloses when the pressure drops below that level.

Scramaglia questioned Wilson's capabilities with regard to identifying hazards. He testified that his job as supervisor required him to review Wilson's performance. Although Wilson was a good worker, his quality index score was below standard. Scramaglia explained that the quality index score is a cumulative score over time based on reviews by supervisors of appliance adjustments, tag completions, and other aspects of the job during the person's period of employment as a gas serviceman. Of 23 people he supervises only three do not exceed the standard. Scramaglia also questioned McQuinn's conclusions. Scramaglia contends that McQuinn did not correctly determine the cause of the odor of aldehydes at Alioto's during his first visit on May 18, 1988; McQuinn erroneously concluded that the problem was due to leaking gas rather than combustion products.

Scramaglia further testified that cleaning air ducts to achieve proper combustion is not considered a temporary repair. It is considered permanent since thereafter only regular maintenance is necessary to keep the ducts sufficiently open.

Arjona testified regarding the standard practices of PG&E for temporary or permanent repairs on gas appliances, and whose responsibility it is to maintain safe gas appliances. He stated that when PG&E makes a service call the serviceman will attempt to alleviate any hazardous condition if it can be done within the scope of PG&E's standard practices. However, no discretion is allowed relative to allowing a hazardous condition to exist on a gas appliance. If the hazard cannot be alleviated by the serviceman, the appliance must be disconnected. If a temporary repair is made and no hazard exists, a call-back tag may be issued to insure that a permanent repair is accomplished. If the

permanent repair has not been made when the call-back visit is made, additional call-back tags may be issued as long as no hazard exists.

Arjona further testified that PG&E does not periodically check the condition of gas appliances since all gas appliances need some regular maintenance, and gas appliances are the customer's responsibility. When a customer such as Alioto's has a qualified plumber handling maintenance of its gas appliances, PG&E would not routinely go back to verify whether the alleged replacement or repairs have actually been accomplished. To do so would require an extensive effort on PG&E's part.

CACD witness McMahon testified that following the filing of this complaint with the Commission, he visited Alioto's twice, on August 25 and 27, 1987 to investigate the condition of the heater. According to McMahon, on both occasions the heater was operating properly, i.e., the combustion and flame color were normal, there was no odor of aldehydes, no spilling of combustion products or flame recirculation was occuring, and the air vents were reasonably clear.

After the conclusion of testimony, Wilson, through his attorney Mark D. Skilling, requested that he be allowed to file for intervenor funding in this matter.

Discussion

It is clear that under PG&E's standard practices, if the hazardous condition on a gas appliance is alleviated and no hazard remains, gas service need not be terminated and the appliance need not be taken out of service. Under these conditions, issuance of a call-back tag is allowed.

Extensive testimony was presented by both the complainant and defendant on the condition of the heater in May and June of 1987. Wilson and McQuinn believe that the conditions at that time were clearly hazardous and warranted shutdown of the heater and possibly even shut-off of all gas to Alioto's. On the other hand,

PG&E's witnesses contend that the conditions at the time were not hazardous and did not warrant such action. Rather, Jones insured that the vents were adequately clean for proper combustion before leaving Alioto's, and issued call-back tags to insure that the vents would later be thoroughly steam-cleaned to remove the oily deposits. CACD witness McMahon found the heater to be operating properly in late August. We agree that the condition in August has no bearing on the condition in May or June, but it does demonstrate adequate maintenance and proper operation of the heater subsequently.

We note that there is disagreement among the witnesses about what constitutes a temporary versus a permanent repair. In this instance it is largely a matter of judgement since no repair or maintenance procedure on heaters of this type is permanent, particularly with regard to air vents. Some amount of regular, routine maintenance is necessary if the heater is to continue to operate safely and reliably. Therefore, we will not further consider this issue.

Addressing the specifics of the complaint, we consider whether the heater was a hazard and should have been shut down in May or June of 1987. Based on the testimony we note that the very low measured levels of CO indicate proper combustion and ventilation of the heater. Even during the worst case condition of startup the measured CO level was less than one-tenth of one percent of the allowable limit under the OSHA standard for eight hours exposure. That standard is appropriate since a person's length of exposure in the area of the heater, including the women's restroom, would not be expected to exceed eight hours a day. Wilson's contention that a hazardous level of CO existed on June 10, 1987 is not supported by the evidence. Wilson had no accurate means of determining CO level. His basis of estimating the level by the degree of irritation to his eyes, lips, and nose is subjective in nature, and cannot be used as an reliable basis for

determining whether a hazard existed. There is no evidence that the operating condition of the heater was significantly different on June 10 than on May 18, 1987. Based on all the evidence, we conclude that after the air vents were temporarily cleaned Alioto's heater constituted no hazard due to CO between May 18 and June 10, 1987.

We will now consider the issue of the potential of a fire hazard due to burn-through of both the combustion chamber and the vessel. We believe that what Wilson and McQuinn consider to be a combustion chamber is rather a shield. As Jones pointed out, it has nothing to do with combustion, since the combustion occurs below it at the burner. During normal operation the combustion is not affected by the shield. The only time the flames contact the shield is when inadequate air is available for proper combustion, at which time the flames extend and are deflected by the shield. Therefore, we agree with Jones that the normal function of the shield is only to distribute the heat from the burner along the bottom of the vessel.

We note that there is evidence that the shield has deteriorated, and that this apparently occurred during periods when the air vents were clogged. However, we accept Jones' testimony that it is possible for the shield and heater to burn through under prolonged or repeated conditions of incomplete combustion from clogged air vents. If this occurred, burn through would occur at the bottom of the vessel directly above the burner, which would cause water to leak, and since the water is under pressure in the vessel, the pressure would cause rapid leakage that would quickly extinguish the pilot light. As Jones indicated, the gas valve would remain open allowing gas flow only while the pilot light continued burning. Once the pilot light was extinguished, the gas valve thermal sensor at the pilot light would quickly detect the resulting temperature drop, and shut off the gas flow to the heater. This would eliminate any fire hazard.

We therefore conclude that deterioration of the shield was not a fire hazard that required disconnecting the heater.

The third safety issue raised by Wilson is the alleged potential for explosion due to lack of proper protective devices to relieve excessive pressure. Jones testified that the heater is protected from excessive pressure by a single pressure relief valve that is piped to and protects both heaters at Alioto's. The pressure relief valve connects to an expansion tank that holds any water that may be released due to excessive pressure. Wilson did not refute Jones' testimony on this issue. Photographs entered into evidence show this piping installation to be as described by Jones. We agree with Jones that such an installation offers the same level of protection against over-pressure as if separate pressure relief valves were installed at each heater. Therefore, we conclude that the evidence demonstrates that proper protection against excessive pressure in the heater was in place, and that as a result no hazard of explosion existed at Alioto's.

We will now address the additional operational issues raised by Wilson. First, he believes that PG&E should not be allowed to issue repeated call-back tags before shutting down a gas appliance. However, we note that PG&E considers a call-back tag to be no more than a gentle reminder to the customer to correct conditions that are not now hazardous but could develop into a hazard later. Since maintenance of gas appliances is the customer's responsibility, we see no reason to require PG&E to implement inflexible requirements on call-back tags as long as no hazard exists. As pointed out by PG&E, some discretion is appropriate since there are times when service people are delayed and unable to honor scheduled commitments to customers. At other times service people may be unavailable due to more urgent needs such as correcting hazardous conditions that cannot wait.

Of course, if a hazard is discovered, we agree that it must either be repaired or corrected; temporarily alleviated and a

call-back tag issued; or if not, the appliance must be taken out of service until corrected. The contention by Wilson that PG&E fears the political clout of Alioto's is not supported by the testimony. As PG&E indicates, commercial customers such as Alioto's are treated differently than residential customers for valid reasons. The consequences of shutting off the gas to a restaurant are greater than shutting off gas to a residence. More importantly, commercial establishments frequently employ qualified service people who can be relied on to properly perform regular maintenance on facilities such as heaters. On the other hand, many residential customers do not have such expertise and therefore may not be competent to perform the required maintenance and repairs.

In this case, we note that Alioto's had already employed a plumbing contractor for heater maintenance. Since the evidence supports the conclusion that no hazard existed at Alioto's during the May 18 to June 10, 1987 period following cleaning of the air vents, we conclude that PG&E operated reasonably in issuing the call-back tags; they were issued only to insure that the air vents were thoroughly steam-cleaned so they would not quickly clog again.

A related question deals with follow-up after a customer assures PG&E that the hazard has been corrected. Should PG&E routinely check on whether the customer such as Alioto's has actually accomplished the repair through its plumber? We don't believe that such a check should be mandatory. We believe that most commercial customers believe it is in their best interests to maintain a safe environment at their place of business, and have qualified service personnel handling maintenance and repairs. Therefore, we conclude that it is reasonable for PG&E to accept the customer's assurance that the maintenance and repairs required by the call-back tag have been accomplished.

We conclude that the evidence does not support Wilson's allegations of gross negligence, violation of PG&E's or the

Commission's safety rules, or serious willful misconduct, by PG&E at Alioto's between May 18 and June 10, 1987.

Regarding the question of Wilson's eligibility for compensation, the Commission has authority under Public Utilities Code Sections 1801 through 1808 to award compensation to public utility customers for reasonable advocate's fees, reasonable expert witness fees, and other reasonable costs of participation or intervention in any proceeding of the Commission to modify or influence a rate. Wilson's request for intervenor funding could be considered by the Commission if the case dealt with modifying or influencing a rate. Since it clearly does not deal with rates, we conclude that Wilson is not entitled to consideration for compensation of his costs of participation.

Findings of Fact

1. Wilson filed a complaint against PG&E asking that the Commission charge PG&E with gross negligence, violation of the rules of PG&E and the Commission, and serious willful misconduct with regard to a heater at Alioto's.

2. McQuinn, a PG&E serviceman, was sent to Alioto's on May 18, 1987 to investigate a reported gas leak and was not allowed by Alioto's to shut off the gas to perform a leakage test.

3. Later, Jones, who is McQuinn's supervisor, went to Alioto's on May 18, 1987, inspected the heater and found it to be operating safely after cleaning the air vents and the burner. He issued a call back tag to insure that Alioto's would steam-clean the air vents in the heater room.

4. PG&E's standard procedures require that a serviceman must either alleviate any hazard found existing on a gas appliance, or disconnect the appliance. If a temporary repair is made and no hazard exists, a call-back tag may be issued by a supervisor to insure that a permanent repair is accomplished. If the permanent repair has not been made when the call-back visit is made,

additional call-back tags may be issued by a supervisor as long as no hazard exists.

5. Alioto's had not steam-cleaned the air vents when McQuinn performed the call-back visit the following week. A second call-back tag was issued by Arjona.

6. Alioto's had not steam-cleaned the air vents when Wilson performed the second call-back visit on June 10, 1987. At that time Wilson believed that the heater was emitting hazardous levels of CO, but had no means of testing for CO level.

7. McMahon, of the CACD, visited Alioto's on August 25 and 27, 1987 following the filing of this complaint. He found the heater operating properly, and the air vents reasonably clear.

8. If the shield and vessel base burn through, the leaking water would extinguish the pilot light of the heater, causing the gas valve to automatically shut off the gas supply to the heater.

8. The heater is protected from explosion due to excessive pressure by a pressure relief valve.

9. The complainant has failed to establish that PG&E did not act in accordance with its standard practices or the gas safety rules of the Commission.

10. The complainant asked to be allowed to file for intervenor funding in this matter.

Conclusions of Law

1. PG&E acted in accordance with its standard practices by alleviating any hazardous condition that may have existed at the heater at Alioto's between May 18 and June 10, 1987, was not grossly negligent, did not violate rules of PG&E or the Commission's gas safety rules, and did not demonstrate willful misconduct.

2. Wilson does not qualify for intervenor funding since this case does not deal with rates.

3. Since the complainant has failed to establish that PG&E did not act in accordance with its standard practices or the gas safety rules of the Commission, this complaint should be denied.

O R D E R

IT IS ORDERED that this complaint is denied.
This order becomes effective 30 days from today.
Dated JUL 22 1988, at San Francisco, California.

STANLEY W. HULETT
President
DONALD VIAL
FREDERICK R. DUDA
G. MITCHELL WILK
JOHN B. OHANIAN
Commissioners

I CERTIFY THAT THIS DECISION WAS APPROVED BY THE ABOVE COMMISSIONERS TODAY

Victor Weisser, Executive Director

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We conclude that the evidence does not support Wilson's allegations of gross negligence, violation of PG&E's or the