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BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

LINDA AVERY, Complainant, vs. PACIFIC GAS AND ELECTRIC COMPANY, Defendant.	Case 87-08-033 (Filed August 19, 1987)

Linda Avery, for herself, Mark Coleman, Attorney at Law, and Howard Avery, for Linda Avery, complainant.
Susan Rockwell, Attorney at Law, for Pacific Gas and Electric Company, defendant.

O P I N I O N

Complainant Linda I. Avery (Mrs. Avery) disputes electric bills for unmetered energy from Pacific Gas and Electric Company (PG&E) in the amount of $3,452.33 for usage at her present residence at 327 West San Carlos Avenue (San Carlos) for the period of June 1, 1984 to July 28, 1986, and in the amount of $1,901.20 for usage at her prior residence at 525 East Stuart Avenue (Stuart), for the period April 29, 1982 to June 4, 1984. Mrs. Avery is the customer of record for PG&E electric service at both locations during the periods indicated. Both residences are located in Fresno. PG&E rendered the bills after investigating meter tampering alleged to have occurred during the time the Averys resided at each location. In the complaint Mrs. Avery states that at least two other parties resided at Stuart since the Averys moved out.

At the hearing on October 30, 1987 Mrs. Avery appeared and was represented by her husband Howard Avery (Mr. Avery), and by attorney Mark Coleman (Coleman). Mr. and Mrs. Avery (Averys) stated that the billing for unmetered energy is wrong, and that meter tampering could have occurred but they have no knowledge of it. Mr. Avery testified that both he and Mrs. Avery work and are away from home nearly 12 hours a day and that as a result, they could not have used as much energy as PG&E claims in its billing calculations.

PG&E presented the testimony of two witnesses, Roy H. Metzler (Metzler) and John I. Chagoya, Jr. (Chagoya). Chagoya testified that he started an investigation at the Avery's San Carlos residence after an anonymous telephone caller stated that Mr. Avery had been seen removing the electric meter. On July 24, 1986, Chagoya obtained a meter reading for the eight days since the regular meter reading on July 16, 1986, that indicated an average usage of 106.626 kilowatt-hours (kWh) per day. He compared this with the 1985 and 1984 average usage of Averys at 35.1 and 23.4 kWh per day, respectively, which indicated possible meter tampering. Since he was going on vacation Chagoya asked Metzler to obtain further meter readings in his absence. Metzler removed the meter and found substantial wear on the meter prongs, indicating that it had been removed and reinstalled numerous times.

On his return Chagoya checked the Stuart meter and concluded that meter tampering had also occurred there but was not presently occurring. The meter prongs were extensively worn, indicating that the meter had been removed many times. The screws holding the potential link were worn, indicating that the potential link had been opened and closed many times. The potential link supplies electrical potential to the meter so that electrical usage can be measured. If the potential link is open the meter cannot measure the flow of electricity.

Although PG&E backbilled Mrs. Avery from April 29, 1982, the Commission has determined that backbilling can go back only three years so we will adjust the amount of backbilling to correspond. Metered usage at Stuart during the portion of the three-year backbilling period that Averys resided there indicates unusually large month to month fluctuations as shown in Table 1 below. Also, the average usage is significantly lower than the five neighbors year-round average of 28.8 kWh/day.

TABLE 1

Date of Meter Reading	Days Usage	kWh Measured	kWh/day
9/15/83	31	798	25.7
10/14	29	335	11.6
11/14	31	301	9.7
12/14	30	513	17.1
1/16/84	33	582	17.6
2/14	29	420	14.5
3/15	30	422	14.1
4/13	29	347	12.0
5/14	31	767	24.7
6/04/84	21	199	9.5
Total	294	4,684	

4,684 ÷ 294 = 15.9 avg.

Averys did not refute PG&E's allegation that they were also responsible for meter tampering at the Stuart residence but disagreed with the amount PG&E billed for unmetered electricity at Stuart.

Averys and Coleman contend that the backbilling amount is excessive.

In order to meet their burden of proof at Stuart, Averys would have had to satisfactorily explain why the unusual patterns of electricity consumption during their residency at Stuart do not imply meter tampering. The patterns include a usage level of 55% of the five neighbors' average, and widely fluctuating usage from month to month. Either pattern would arouse suspicion, but

together they indicate very unexpected conditions of usage. If a customer is very conservation conscious and maintain usage levels substantially lower than normal or average for the type of residence, the usage would not normally fluctuate dramatically month to month beyond seasonal fluctuations. When we see kWh/day usage vary from 9.7 to 17.1, and 24.7 to 9.5 from one month to the next, we would expect a convincing showing of why such fluctuations are valid and do not imply meter tampering.

PG&E did not fully meet its burden of proof at Stuart. Since alleged meter tampering was not discovered while Averys lived at Stuart, PG&E did not inspect the meter for signs of tampering during that period.

However, the recorded usage of Averys and a subsequent resident, as well as the five neighbors' average makes Averys usage very suspect. The physical evidence of meter tampering was similar to that found at San Carlos. In addition, the same types of unusual usage patterns seem to have existed at Stuart as at San Carlos during Averys residence at each location.

We conclude that although other party(ies) have resided at Stuart since the Averys moved out, meter tampering occurred during the period of Avery occupancy. Mr. Avery acknowledged that meter tampering probably occurred at San Carlos, although from unknown persons. We conclude that unmetered energy was consumed at both Avery residences, that the Averys benefitted from unmetered energy, and should be billed for its value. The Commission is not concerned with determining who did the meter tampering, as indicated in Decision (D.) 86-06-035:

> "The only questions that the Commission needs to answer to resolve these complaints...are 'Was energy used by the customer but not paid for?' and 'What is a reasonable estimate of the value of that energy under the applicable tariffs?' Identifying the person who performed the tampering or diversion is not a task that the Commission needs to undertake. Our sole purpose in resolving these complaints is to

> determine the value of the energy that can be shown to have been used by the customer but not metered or billed by the utility. Whether the customer or someone else actually performed the tampering or diversion does not affect the outcome at all; the customer is responsible for paying the value of any unmetered energy, regardless of whether the metering discrepancy resulted from tampering by the customer, tampering by a stranger, mechanical failure of the meter, or any other reason. Determining the identity and intentions of the person who performed the tampering or diversion is not pertinent to our proceedings and is an act which we have neither the resources nor desire to perform... Our only concern is that a customer who has received energy should pay what the applicable tariffs prescribe for that energy."

Therefore, we will focus on determining the amount of unmetered energy that was likely consumed and the value of it so that PG&E can properly bill Mrs. Avery. The Commission's energy diversion guidelines, approved on November 7, 1986, call for the following information to be used in developing estimates of unmetered energy:

1. A minimum base measurement with an accurate meter of 30 days.

2. Consumption records for two years prior to the onset of energy diversion.

3. Average monthly consumption during the diversion period for the combined usage of five or more residences in the vicinity of the site of unauthorized use.

4. A list of connected load.

We will separately consider each of the residences in question.

San Carlos

Regarding Guideline 1 Chagoya claims that due to the meter tampering at San Carlos, a 30-day period is not practical because it would require constant monitoring. We are not convinced that a 30-day reading is impractical. For example, PG&E apparently made no attempt to change the type of lock on the meter, and did not routinely monitor the meter. We do not see that either of those actions would cause an undue hardship to PG&E and think such efforts are warranted in a case of this type. Eight days usage cannot be relied on as representative since it can be easily skewed due to unusual consumption habits or weather. Averys testified that during the eight-day period Mrs. Avery was home some of the days due to PG&E's request that someone be home to allow access for transformer maintenance. As a result, they allege that usage was higher than normal for those days due to air-conditioning (A.C.) and other uses that would not occur if she were not home. Although PG&E could not find service records for any work performed on that transformer during the eight days, Chagoya testified that PG&E could have been out for such service, but just cannot find the records.

Regarding the other energy diversion guidelines for San Carlos, Guideline 2 is not practical since the residence was new when Averys moved in. Under Guideline 3 the average monthly consumption for five or more similar residences (from Exhibit 9 of Exhibit 2) is 1,037 kWh/month for the months November through April, and 1,820 kWh/month from June through September. We do not use the shoulder months of May and October since the half-month usages corresponding to the beginning (mid-May) and end (mid-October) of the A.C. season are not available, so we will use a five-month (June through September) A.C. season. Regarding Guideline 4, no detailed information was furnished by PG&E on normal usage of the connected load.

Metzler testified that in developing the backbill for San Carlos for the non-A.C. months PG&E used an average daily usage of 41.6 kWh/day. This is based on metered usage of 1,331 kWh from August 14 to September 15, 1986 on PG&E's assumption that since a new meter was installed the Averys turned off their A.C. and that therefore this measured summertime usage was indicative of non-A.C. usage. The following Table 2 (San Carlos) summarizes data from Exhibit 6 of Exhibit 2 sponsored by Chagoya:

TABLE 2
(San Carlos)

Date of Meter Reading	Days Usage	kWh Measured	kWh/day
01/15/87	31	710	22.9
12/15/86	31	719	23.2
11/14/86	31	711	22.9
10/14/86	29	733	25.2
09/15/86	32	1,331	41.6
08/14/86	29	2,303	79.4
07/16/86	30	1,161	38.7
06/16/86	32	1,093	34.2
05/15/86	30	492	16.4
04/15/86	32	629	19.7
03/14/86	30	709	23.6
02/12/86	29	297	10.2
01/14/86	32	616	19.3
12/13/85	30	530	17.7

We do not agree that 1,331 kWh/month or 41.6 kWh/day is representative for non-A.C. months. September is a hot month in Fresno and some A.C. usage would be expected. Even if only the A.C. fan were used, an increase in usage over cooler months would result. Table 1 clearly demonstrates this effect since usage after mid-September 1986 decreased by nearly half to a consistent low-700 kWh level. Usage prior to the summer of 1986 also was fairly constant in the 500 to 700 kWh/month range for most months. During the summer, 1,331 kWh/month was higher than the months' usage ending in mid-June and mid-July, although the mid-August reading

was much higher. For the non-A.C. months, the 718 kWh/month or about 24 kWh/day average from Table 1 (San Carlos) for the four months usage beginning September 15, 1986 compares to the five neighboring homes' average of 1,037 kWh/month. We conclude that the non A.C. months' usage is reasonably approximated by 718 kWh/month. This represents a 46% reduction from the level used by PG&E.

PG&E used a base period of only eight days, July 16 to July 24, 1986, in calculating the backbill for the normal A.C. months at San Carlos. The average usage measured for the eight days was 106.626 kWh/day. The five neighbors' average usage for the A.C. months was 1,820 kWh/month or 61 kWh/day. This compares to the averages in Table 3 below that range from 6.6 to 106.625 kWh/day.

TABLE 3

Date of Reading	Usage-kWh	No. of days	Avg. kWh/day	Notes
8-14-86	1,303	16	81.437	
7-29-86	43	1	43.0	
7-28-86	20	3	6.6	Meter stopped, A.C. on.
7-25-86	84	1	84.0	Seal cut
7-24-86	853	8	106.625	
7-16-86	beginning reading		-	

Looking at the average kWh/day column, as discussed earlier we believe that 106.625 representing an eight-day average is not normal. The 6.6 value is also not normal since the meter was not turning. The 43.0 value was for the day immediately after PG&E notified Averys of the new meter and may reflect reduced usage as a result. The two averages that appear most representative of usage are the 81.437 and 84.0 kWh/day values. However, in looking at the usage patterns of the five neighbors it is apparent that A.C. usage is lower in early summer, and October indicates little

or no A.C. usage. As a result, it is not reasonable to base the entire five month A.C. period on the July and August usage.

A further reduction in PG&E's estimated usage is required since evidence shows that the Averys' hot tub was not installed until July 1986 although PG&E assumed it was in place for the entire billing period at San Carlos. PG&E estimates this reduction to be between 105 and 210 kWh/month for the A.C. months only. PG&E did not assume that the hot tub was used in the non-A.C. months.

Metzler testified that in his experience, usage almost always decreases after a new meter is installed during a meter tampering investigation, based on the premise that metered usage fosters conservation. This may be true in some or many instances, but we have no evidence that it is true in this case.

Regarding guideline four, Metzler's testimony on normal expected usage for the San Carlos appliance load is too general to be of value here. The information we need is detailed, specific, itemized usage by appliance.

We conclude that a reduction in backbilling for the A.C. months of 23% based approximately on the 81.437 and 84.0 kWh/day recorded usage, further reduced by 7% due to no hot tub use, and reduced by an additional 10% as a result of the recorded usage occurring during an unusually hot part of the A.C. season, is reasonable for backbilling purposes. This 40% reduction yields estimated monthly consumption of about 1,920 kWh, which compares closely to the five neighbor average of 1,820 kWh.

We conclude that a 43% reduction, averaged from the 46% for non-A.C. months and 40% for A.C. months, from PG&E's estimated usage for both A.C. and non-A.C. periods for the backbilling period at San Carlos is reasonable. The actual backbilling to be used is the difference between the adopted billing for the estimated usage and the amount paid by Averys for the same period.

(Ref. Exh. 7 of Exh. 2)

$5,211.48 - PG&E corrected billing for 6/01/84 to 7/28/86

$5,211.48 x 57% = 2,970.54 - adopted billing for 6/01/84 to 7/28/86
less 1,759.15 - actual billing for 6/01/84 to 7/28/86
difference = $1,211.39 - amount to backbill for 6/01/84 to 7/28/86

Stuart

Estimating the usage at Stuart is more difficult since Averys do not currently reside there. The amount of backbilling proposed by PG&E covering the three-year period prior to discovery of the unmetered condition is $738.87, considerably less than the amount for San Carlos due primarily to the shorter backbilling period for Stuart, which should be July 28, 1983 to June 4, 1984. However, PG&E actually based its total backbilling amount (covering both residences) on the period from July 15, 1983 to July 28, 1986, several weeks more than three years.

Energy diversion guidelines one, two, and four are not practical at Stuart since the Averys have not resided there for several years, and the connected load is unknown since the unmetered usage situation became known after Averys left Stuart. However, item three, the recorded usage of neighbors is available. As indicated above, the average daily usage for the five neighbors is 28.8 kWh/day on a year-round average basis.

PG&E's basis for calculating the backbilling at Stuart is severely flawed. Chagoya's testimony is that PG&E obtained a reading of 1,399 kWh for the billing period of July 15, 1983 to August 15, 1983, which equates to 43.7 kWh/day. He felt that this was representative of usage including A.C., but rebilled the entire Stuart period on that basis regardless of whether the billing period was during the A.C. months or not.

Having no evidence that Averys consumed more electrical energy than the neighbors' average, we conclude that the average of

28.8 kWh/day or 65% of the 43.7 kWh/day used by PG&E, is reasonable for backbilling purposes at Stuart. Following the same type of calculation used for San Carlos, the amount to be backbilled for Stuart is:

(Ref. Exh. 8 of Exh. 2)

	$1,014.84	- PG&E corrected billing for 8/15/83 to 6/04/84
$1,014.84 x 65%	= 659.65	- adopted billing for 8/15/83 to 6/04/84
less	283.25	- actual billing for 8/15/83 to 6/04/84
	$ 376.40	- amount to backbill for 8/15/83 to 6/04/84

The total amount of backbilling we adopt for San Carlos and Stuart is:

$1,211.39 + $376.40 = $1,587.79

We will order PG&E to withdraw the earlier backbills and rebill Averys in the amount of $1,587.79 for unmetered energy.

Findings of Fact

1. Mrs. Avery filed a complaint disputing bills for unmetered electricity from PG&E in the amount of $3,452.33 for the period June 1, 1984 to July 28, 1986 at her present residence, 327 West San Carlos Avenue, and in the amount of $1,901.20 for the period April 29, 1982 to June 4, 1984 at her prior residence, 525 East Stuart Avenue, both addresses in Fresno, California.

2. PG&E investigated the electric meter at 327 West San Carlos after receiving an anonymous phone call that Mr. Avery was seen removing the electric meter at that address.

3. The electric meters at both Avery residences showed signs of tampering.

4. Mr. Avery acknowledges that meter tampering may have occurred.

5. PG&E did not comply with the Commission's energy diversion guidelines in calculating the backbilling for Averys.

Conclusions of Law

1. Averys benefitted from unmetered electricity at both residential addresses in Fresno.

2. It is reasonable to bill Mrs. Avery for unmetered electricity from July 28, 1983 to July 28, 1986 in the amounts of $1,211.39 for San Carlos and $376.40 for Stuart.

3. The amount PG&E billed Mrs. Avery for unmetered electricity is unreasonable.

O R D E R

IT IS ORDERED that:

1. Pacific Gas and Electric Company (PG&E) shall bill Linda I. Avery (Mrs. Avery) for unmetered electricity in the amount of $1,587.79, after withdrawing the existing bills rendered for unmetered electricity.

2. Mrs. Avery shall pay the resulting bill to PG&E for unmetered electricity usage from July 28, 1983 to July 28, 1986.

3. Except to the extent granted, the complaint in Case 87-08-033 is denied.

This order becomes effective 30 days from today.

Dated JUN 17 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

PB