Exh. No. CAL-241

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Public Utilities Commission of the State of California *Complainant,* *v.* Sellers of Long-Term Contracts to the California Department of Water Resources *Respondents.*	)	Docket Nos. EL02-60-007 and EL02-62-006 (Consolidated)
California Electricity Oversight Board *Complainant,* *v.* Sellers of Energy and Capacity under Long-Term Contracts with the California Department of Water Resources *Respondents.*	)	

PREPARED DIRECT TESTIMONY OF MICHEL PETER FLORIO ON BEHALF OF THE CALIFORNIA PARTIES

May 19, 2015

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I. INTRODUCTION

Q. What is your name and what is your business address?

A. My name is Michel Peter Florio. My principal office is at 505 Van Ness Avenue in San Francisco.

Q. By whom are you employed and in what capacity?

A. Since January 25, 2011, I have been one of five appointed Commissioners of the Public Utilities Commission of the State of California (CPUC), one of the Complainants in this case.

Q. Where did you work prior to joining the CPUC as Commissioner?

A. From 1978 until my appointment to the CPUC, I was an attorney for The Utility Reform Network (TURN). TURN is a consumer advocacy organization that has represented the interests of residential consumers and small businesses for over forty years in California, including legal advocacy at the CPUC and in the Legislature.

Q. Please summarize your professional and educational background.

A. I spent over 30 years at TURN, litigating every conceivable type of energy case before the CPUC, particularly on rate cases and how rates impact consumers. I also advocated in the California legislative process, working with both the Governor's office and the Legislature on energy related statutes and regulations. I served as a member of the Board of Governors

of the California Independent System Operator Corporation (ISO) from 1997 to 2005.

I have a Juris Doctor from New York University School of Law, a Master's Degree in Public Affairs from the Woodrow Wilson School at Princeton University, and a B.A. from Bowling Green State University.

Q. What topics will you address in your testimony?

A. I will describe the following:

- How the Crisis gravely impacted every aspect of California life from May 2000 through July 2001, when the citizens, businesses and government struggled to cope with unprecedented days of power outages and suffered a year of exorbitant electricity prices;
- What was happening in January through July 2001, when California's leaders tried to mitigate the Crisis conditions and stave off power outages that were widely predicted to continue into the summer of 2001, which we now know was caused in large part by massive market manipulation by sellers and not legitimate supply shortages;
- How California consumers have paid, and will continue to pay, for the 37.5 billion dollars the California Department of Water Resources (CDWR) has expended for long-term contracts entered into during the Crisis – starting with rate hikes imposed on

California ratepayers in early 2001 and continuing with the annual Bond Charges and Power Charges set by the CPUC to pay the costs that CDWR incurred on California's behalf; and

- The detrimental impacts to consumers caused by the spike in wholesale power prices during the Crisis and the overcharges reaped by parties who executed long-term contracts with CDWR, including the Respondents in this case.

Q. Please state your understanding of the purpose of this proceeding.

A. I understand that what is at issue in this proceeding is whether the long-term contracts that CDWR executed with Shell Energy North America (US), L.P. (formerly known as Coral Power LLC)[1] on May 24, 2001, and Iberdrola Renewables, Inc. (formerly known in these proceedings as PacifiCorp Power Marketing, Inc., or PPM Energy, Inc.)[2] on July 6, 2001, should be abrogated or reformed because, among other things, the contract prices and terms were not just and reasonable and they imposed, and continue to impose, an excessive burden on California consumers.

[1] References to either Shell or Coral are to the same entity. I will refer to this contract as the Shell Contract.

[2] References to either Iberdrola or PPM are to the same entity. I will refer to this contract as the Iberdrola Contract.

II. LIFE DURING THE 2000 – 2001 ENERGY CRISIS

Q. Please describe how the 2000-2001 Crisis impacted California.

A. It is hard in 2015 to imagine what it was like to live through the Crisis of 2000 – 2001, but the events from that period are etched in my memory because it truly felt like living in a war zone. Panic and fear gripped the citizens, government officials and businesses of the State as they struggled to cope with inexplicable skyrocketing electricity costs, ballooning utility bills, and living in a near-constant state of ISO-declared electrical system emergencies. The Crisis was unprecedented in the modern history of the U.S. electric industry in terms of its severity, duration, and consumer impacts.

California's continuous struggle to keep the lights on was a regular feature in the national news, as conditions that escalated into the Crisis in the summer of 2000 grew even worse in the winter of 2000-2001 and gave way to rolling blackouts in January 2001. Video footage aired on the ABC news program Nightline on January 24, 2001 vividly illustrates the state of chaos and the impacts on Californians at the time. Exh. No. CAL-242A, B (video and transcript). The sense of panic grew even worse when, in late March and again in May 2001, rolling blackouts again brought businesses and factories to a halt, darkened stoplights, and left disabled persons

literally fearing for their lives.[3] California's leaders, the ISO, and citizens were bracing for an unthinkable second summer of dire conditions, as news reports characterized the March and May blackouts as a "warning" for Southern California, and predicted that "this is not going to be an easy summer for the West Coast." Exh. Nos. CAL-243A, B (video and transcript of ABC World News Tonight, March 19, 2001), CAL-244A, B (video and transcript of ABC World News Tonight, May 8, 2001). Nobody knew when or how the Crisis would end.

Having blackouts hit California in January, March, and May 2001, was also baffling because demand was lower at those times than in the summer, when electricity demand typically peaks in California. We now know that the skyrocketing wholesale prices and blackouts were caused in large part by massive market manipulation by sellers, including Shell and Iberdrola's affiliate, PacifiCorp. But it has only been in the past several years through various FERC proceedings that the extent of market manipulation has been documented and proven. At the time, although we suspected market manipulation, California's leaders had limited information and options as they struggled to ensure there would be sufficient and affordable electricity supplies for the summer months. As a

[3] The Prepared Direct Testimony and Exhibits of Ronald Nichols cite examples from 2001 illustrating the widespread fears that California would not have adequate energy supplies for the summer and describing the impacts of blackouts. *See* Exhibit CAL-51 at 35-36 and CAL-72 at 3-8. I provide further examples below.

member of the Board of Governors of the ISO and an attorney for TURN at the time, I was involved seven days a week as California struggled to comprehend and develop potential solutions to the Crisis, repeatedly having to make very hard decisions among only bad choices.

Today, fourteen years later, it's easy to take the reliability of the bulk electric system for granted. There have not been rolling blackouts or a Stage Three Emergency in California since 2001 and it's been years since the ISO declared any kind of system emergency.

Q. What do you mean by system emergency?

A. Through my service as a member of the ISO Board of Governors from 1997 to 2005, I understood that to promote reliability and avert cascading outages, the ISO implemented a system for alerting scheduling coordinators about potential problems meeting load. Under this system the ISO can declare a series of escalating system emergencies if operating reserves fall too low, beginning with a Stage One Emergency, escalating into a Stage Two Emergency, and finally reaching a Stage Three Emergency if operating reserves are (or are forecast) to dip so low that there is a potential for uncontrolled load interruptions. The declarations signal emergency measures the ISO may implement to ensure the overall reliability of the bulk electric system. For example, in a Stage One Emergency the ISO can urge conservation. In a Stage Two Emergency the ISO can intervene in the

markets and require utilities to interrupt service to customers who had elected non-firm service ("interruptible customers"). A Stage Three Emergency notifies utilities of potential load interruptions and the ISO can curtail firm-load and impose rotating outages, commonly known as rolling blackouts.

Q. Does the ISO declare a system emergency very often?

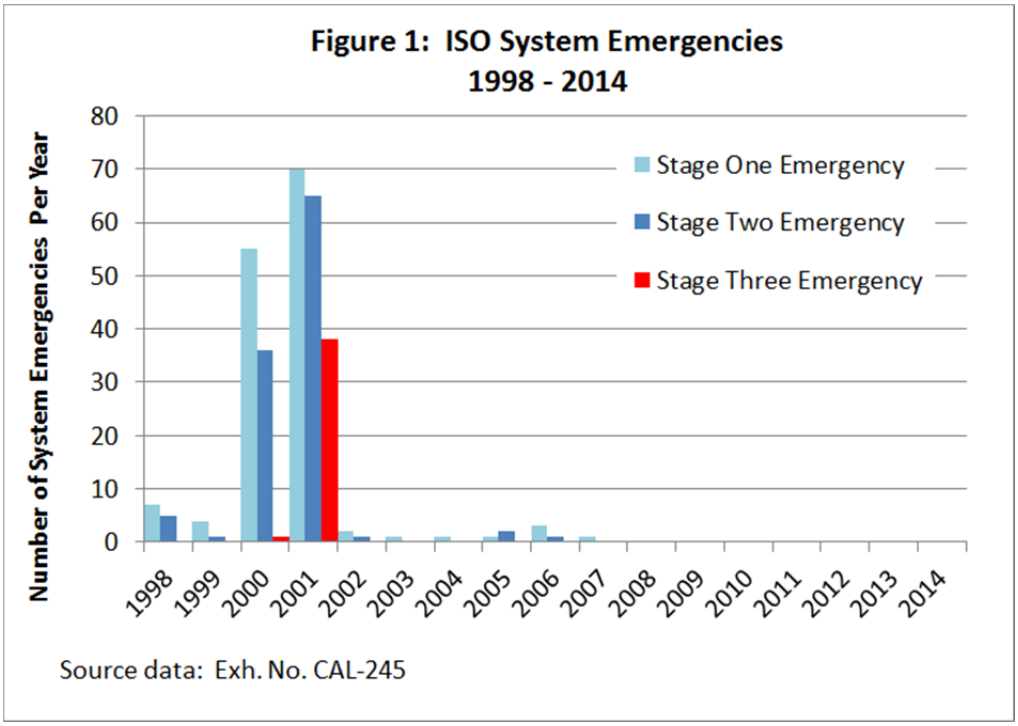
A. No. They are rare – except for during the Crisis, when the number of system emergencies was truly unprecedented. Figure 1 below shows the total number of ISO system emergencies declared each year from 1998 to the present, based on ISO data reproduced in Exh. No. CAL-245 (ISO Grid History - 1998 to Present).[4] In its sixteen years of operations the ISO has issued only thirty-nine Stage Three Emergencies – all during the Crisis. *Id.* at 1, 3-7. From May 2000 through July 2001, the ISO declared 125 Stage One Emergencies and 101 Stage Two Emergencies, compared to eleven Stage One Emergencies and six Stage Two Emergencies in 1998 and 1999 combined. *Id.*

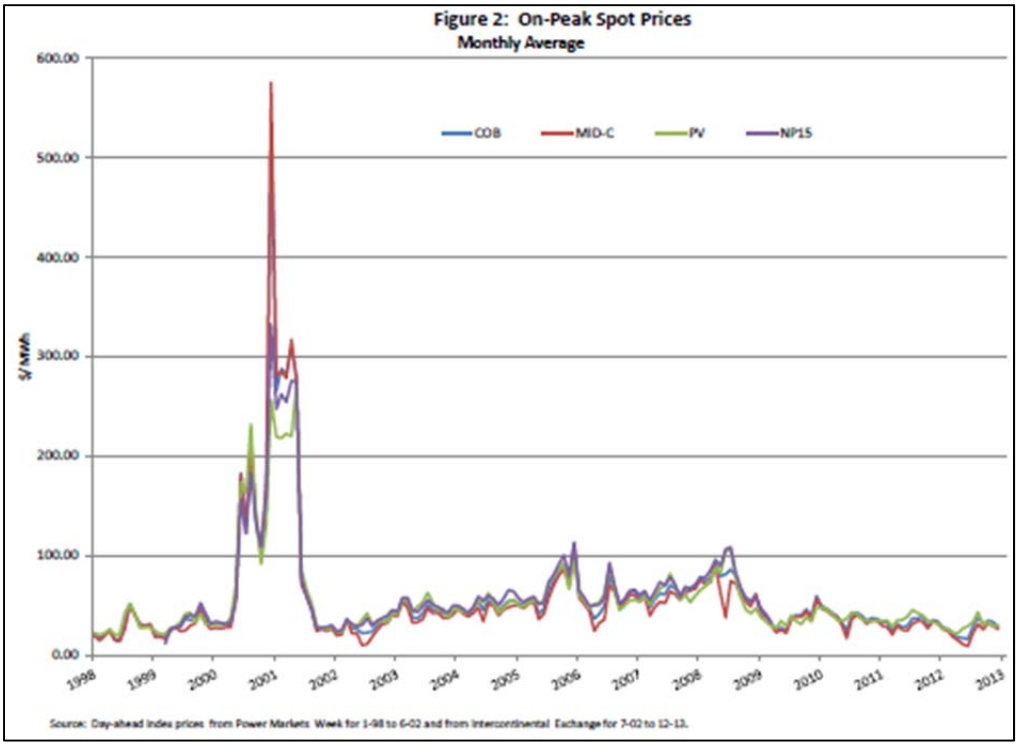
Q. Did a Stage Three Emergency mean that the lights would go out?

A. Not necessarily, but it meant that the ISO could institute rolling blackouts with very short warning. These symptoms of system unreliability also correlated with the equally unprecedented and dramatic rise in Spot Market

[4] Grid History Report, First quarter 2015 update (April 7, 2015), available at http://www.caiso.com/informed/Pages/Notifications/NoticeLog.aspx.

prices, as shown in Figure 2, below (and Exh. No. CAL-246).[5]





[5] Figure 2 (CAL-246) is reproduced from FERC Docket No. EL01-10-085 Exh. No. CAT-270, which was attached to my Prepared Rebuttal Testimony.

Q. Did the increases in Spot Market energy prices starting in 2000 shown in Figure 2 instantly affect ratepayers?

A. Only in some parts of California. Consumers in the service territory of San Diego Gas & Electric Company (SDG&E) felt the effects of the Crisis immediately starting in the summer of 2000, because SDG&E's retail rates reflected a contemporaneous pass-through of wholesale prices. SDG&E's customers saw their bills at least double when wholesale prices shot up, even as reliability deteriorated. But at the time the ratepayers of Pacific Gas and Electric Company (PG&E) and Southern California Edison Company (SCE) were insulated from direct pass-through of rising wholesale electricity prices because their retail rates were still frozen at 1996 levels.[6]

Q. Did SDG&E ratepayers react to the increases in their electricity bills?

Absolutely. Widespread public outcry and protests ensued. As a consumer advocate with decades of experience in energy regulation, I expected that increased prices would result in reduced demand. But the situation quickly moved beyond demand reduction to demand destruction. Businesses closed, public agencies exhausted their energy budgets, and many consumers faced growing hardships in trying to meet their regular expenses

[6] I give additional background on the rate freezes after the electricity restructuring in Exh. No. CAL-247 at 6-7 (Prepared Direct Testimony of Michel Peter Florio, September 21, 2012, FERC Docket No. EL01-10-085).

as well as the spiraling cost of electricity. San Diego ratepayers swamped TURN, the CPUC and probably many others with panicked calls, and news outlets worldwide began covering the Crisis.

At hearings that the CPUC held in San Diego in August 2000, I learned about the distress that escalating bills were causing not only for individuals, but also for businesses, hospitals, schools and every other type of electricity consumer. TURN and the CPUC also received hundreds of letters telling stories of terrible hardships in San Diego. I conveyed some of these stories of human and economic hardship in my Prepared Direct Testimony in FERC Docket No. EL01-10-085, which is reproduced as Exh. No. CAL-247. I will not repeat them all here but will relay a few in particular that stand out for me:

Diane Jacob, President of the San Diego County Board of Supervisors, told of businesses cutting their hours, laying off workers, and adding surcharges to their prices to cover electricity costs:

> The [F.F.] Market, which was a new store that opened just a couple of years ago, their July bill was some 200 percent higher than what it was last year. They are paying some $13,000 more for electricity than they were a year ago. And they have put the county on notice, as many other businesses have, that they are going to have to close their doors unless they get relief and get it soon.

Exh. No. CAL-247 at 12.

Ms. Jacob also spoke at the hearings of residents who had to make choices between buying food, medicine, operating life-saving medical devices, or paying their electricity bill. She cited the example of customer D.G.:

> [D.G.]… he is a mobile home park resident. He's 100 percent disabled, lives on a limited income, and the cost of electricity for him has gone from $190 in June to $362 in July.… He has an electrically powered oxygen device 10 hours a day to help him breathe, basically, to stay alive. And without that – I mean, he can't cut off his air conditioner, he can't cut off his oxygen, or he loses his life….

Id. at 12

J.B. sent a letter to the CPUC on August 20, 2000 describing the cascading effect of higher electricity prices beyond the impacts on his own electric bill, which increased from $80 in the prior year to $165 in July 2000, as restaurants had begun adding a 10 percent electricity surcharge to their food bills. *Id*. at 15.

Q. Did the CPUC or the Legislature take action in response to the public outcry that followed the direct pass through of wholesale electricity costs to consumers in San Diego?

A. Yes. In late August 2000 the Legislature enacted AB 265, which rolled back SDG&E's rates to pre-Crisis levels for residential, small commercial, and street lighting customers, but allowed SDG&E to record the

unrecovered costs in a balancing account for later recovery.[7] The CPUC quickly implemented a rate cap of 6.5 cents per kWh for these customers, retroactive to June 1, 2000.[8] These stories and the public outcry in San Diego in 2000 clearly taught me, and others responsible for energy policies in California, that consumers simply could not manage to absorb 100 percent of the wholesale electricity price increases all at once. It was just too devastating. Continuing the full pass through of the outrageous wholesale prices to individuals and businesses in San Diego was not a viable option.

Q. Did wholesale prices decline after the summer of 2000 ended?

A. Not really. As summer turned into the fall of 2000, the widespread hope was that lower customer demand would lead to reduced prices. Electricity consumption peaks in California during the summer, when temperatures are hot and air conditioning is required, rather than in the winter, when temperatures tend to be milder. But the relief was temporary, at best, and then the situation rapidly worsened. In late 2000 Spot Market prices shot up even higher than they had been in the summer 2000, as shown in Figure 2 above. And with their retail rates still frozen, California's three major

[7] Cal. Pub. Util. Code § 332.1 (added by Stats. 2000, ch. 328).

[8] *CPUC Opinion Expanding the Rate Stabilization Plan for San Diego Gas and Electric Company* (2000) D.00-09-040.

Investor Owned Utilities (IOUs) – PG&E, SCE, and SDG&E – faced spiraling under-collections for their power purchase costs.

Q. Were the IOUs able to continue purchasing wholesale energy in light of the under-collections?

A. No, not for long. With the wholesale energy costs the IOUs were incurring dramatically outpacing what they could collect from ratepayers, PG&E and SCE rapidly approached insolvency. As the Electric Power Daily reported in early January, 2001, PG&E requested "a 26% rate hike, with mechanisms to trigger further increases later if current wholesale prices continue" and told the CPUC that "the utility will run out of cash in three weeks" if it could not raise substantial sums of money. CAL-248 at 1-2 (*PG&E tells [CPUC] that rate hike alone won't provide immediate financial relief,* Electric Power Daily, January 2, 2001). SCE requested a 30 percent rate increase. *Id*. A few weeks later, Megawatt Daily reported that SCE could not pay its bills to the California Power Exchange (PX) and Qualifying Facilities totaling over $366 million, and had "suspended $230 million in interest and principal payments on commercial paper." CAL-248 at 3-4 (*SoCalEd [SCE] suspends power payments*, Megawatt Daily, January 17, 2001).

As the IOUs started hitting their credit limits, energy providers became unwilling to sell energy into the ISO's market. A story reported by

Copley News Service illustrates how the IOU's finances were perceived as creating more problems for the ISO:

> ISO officials say California's power situation worsened when more than a dozen suppliers balked at selling power to the state's utilities.
>
> "The credit limits of utilities and what markets are willing to sell us have been reached and surpassed in many cases," said Kellan Fluckiger, the ISO's chief operating officer. "There are questions about utility solvency. That has come to a head today."
>
> Fluckiger characterized the standoff as a "fairly bleak" situation that will not be eased unless "something is done to alleviate the credit situation."
>
> The ISO wrote to the Governor's Office that some "suppliers (have) advised us through their dispatchers that they are unwilling to sell power into the California markets through any entity."

Exh. No. CAL-248 at 5-7 (*Richardson forces generators to supply California*, Joe Cantlupe, Copely News Service, December 13, 2000).

Q. Did California's leaders or the CPUC respond to PG&E and SCE's requests to collect more revenues from ratepayers to fund their wholesale energy purchases?

A. Yes. The CPUC raised retail rates by one cent per kWh on January 4, 2001 for PG&E and SCE's customers.[9] Eventually the CPUC raised retail rates even higher, along with instituting other mechanisms to pay back the

[9] *CPUC Interim Opinion Regarding Emergency Requests for Rate Increases* (2001) D.01-01-018 at 1-2 (implementing an immediate, interim surcharge by allowing PG&E and SCE to increase customer bills by one cent per kWh applied on a usage basis).

billions of dollars of overcharges the Crisis ultimately cost.[10] But increasing retail rates to reflect a full-pass through of the jacked-up wholesale prices at the time was unthinkable. That was the difficult, but undeniable, lesson I learned from the disaster in San Diego in the summer of 2000: consumers simply could not absorb 100 percent of the price increases all at once because it was just too devastating.

In any case, it was too late by mid-January, 2001 to avoid the financial crisis caused by the inflated wholesale energy prices – prices that we suspected at the time, and now know, were the result of sellers' massive market manipulation. We were past the tipping point, as the IOUs' deteriorating credit gave way to continuous Stage Three Emergencies and rolling blackouts starting on January 17, 2001, the same day that Megawatt Daily reported that SCE could not pay its bills. Exh. No. CAL-248 at 3-4.

The next day, the Los Angeles Times' front-page headline declared, "Rolling Blackouts Push Crisis from Threat to Reality." Exh. No. CAL-249 (Nancy Rivera Brooks, January 18, 2001). The article described the ISO's frantic efforts "trying to hustle electricity from suppliers in the Pacific Northwest and elsewhere," to avoid blackouts by calling every possible supplier, but to no avail. *Id.* at 1-2. Ed Riley, director of ISO grid operations, said "[t]hey gave us what they could and said they were sorry

[10] I explain the mechanics of how the charges were (and are still being) paid for in Section IV below.

they couldn't give us more." *Id*. at 2. Describing the struggles of ISO operators "trying desperately to scrounge enough electricity to get the state through the day," the article reported that one operator's "canvassing finally kicked loose 1,300 megawatts from the Los Angeles Department of Water and Power and [BC Hydro, a] Canadian supplier, allowing the state to get from 5 to 6 p.m. without blackouts. After that, it was more of the same struggle through the evening." *Id*. As to why those electricity supplies materialized, the article acknowledged that "[p]erhaps because operators there realized they would not need as much electricity.… But there could be another reason, Riley said: 'This is the highest price we've paid for energy all day.'" *Id*.

Q. How did California's leadership respond when the utilities became insolvent?

A. Governor Davis proclaimed a state of emergency on January 17, 2001, when the IOUs could no longer acquire and provide electricity sufficient to meet California's energy needs. The Governor ordered the new California Energy Resource Scheduling (CERS) division of CDWR to immediately purchase and sell electric power, as necessary, to mitigate the effects of the emergency. That was when CDWR took over responsibility for purchasing the Net Short.

Q. Did CDWR's stepping in to purchase energy alleviate the system emergencies and blackouts?

A. Unfortunately, no. The situation continued to get much worse. Starting on January 18, 2001, California was in a permanent state of emergency for 31 consecutive days: the ISO declared a Stage Three Emergency every single hour starting at 1:45 p.m. January 18 until midnight February 16, 2001. There were further blackouts on January 21, 2001. Exh. No. CAL-245 at 3-4.

It made no sense that California was suffering from blackouts in January – when electric loads were relatively light and there had always been sufficient supplies in the past to meet summer peak demand. Peak demand on the three days of blackouts in January 2001 was more than 15,000 MW lower than the ISO's highest system peak demand (in 1999). Compare Exh. No. CAL-245 at 3 with Exh. No. CAL-250 (ISO Peak Load History).

Every electricity user has suffered an occasional blackout due to a major storm or distribution level interruptions, but this was like having the electricity reliability you would expect living in a third world country. Ted Koppel broadcast that very sentiment to the entire nation on the Nightline news program on January 24, 2001. Exh. No. CAL-242A, B (video and transcript). It was not what you would expect in California, which in 2001

was the sixth largest economy in the world. The level of confusion, chaos, and panic across the state during that time is hard to overstate, especially because of how much it was costing.

Q. How much was CDWR spending to keep the lights on?

A. From January through May 31, 2001, CDWR spent $4.89 billion for Spot Market power[11] and on average spent $1 billion each month from January - June 2001.[12] But to be clear, that didn't mean that the system emergencies ended or that the lights always stayed on.

I was frequently in Sacramento from January to May 2001, and I will never forget the concern, sometimes bordering on panic, that spread throughout the Governor's staff and legislative leaders as they witnessed what had been about a $6 billion state budget surplus evaporating before their eyes. It was like throwing thousand dollar bills to burn in generators and still suffering from chronic shortages and outages. And in the back of everyone's mind was: what was going to happen in the heat of the summer when California's electricity demand would inevitably climb higher?

[11] Prepared Supplemental Direct Testimony of Ronald O. Nichols on Behalf of the California Parties, Exh. No. CAL-200 at 37.

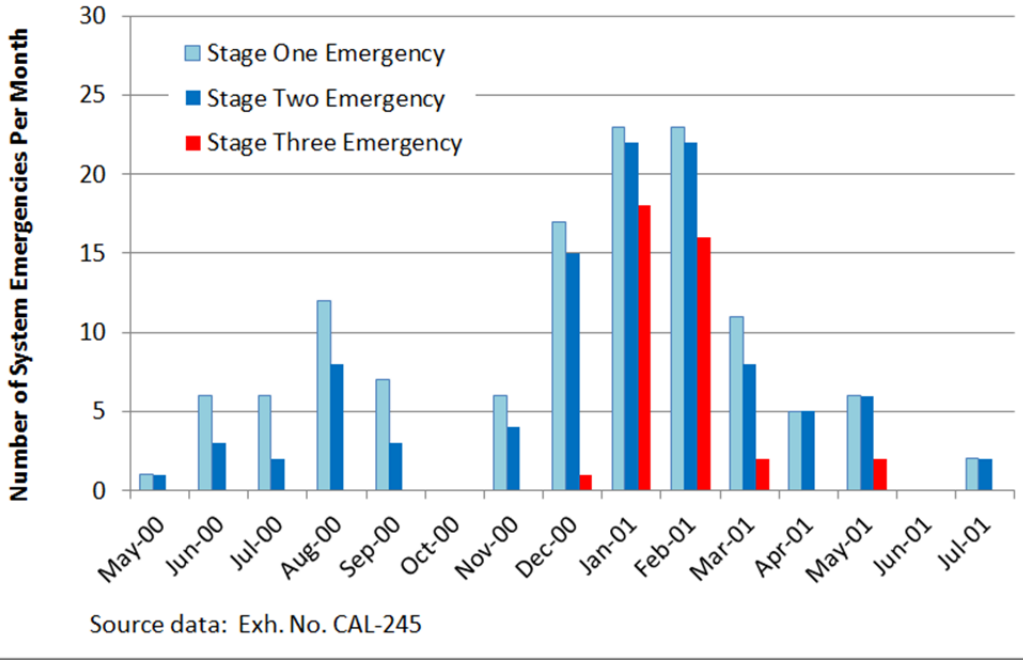
[12] Prepared Supplemental Direct Testimony of Raymond Hart on Behalf of the California Parties, Exh. No. CAL-210 at 5.

III. BRACING FOR THE SUMMER OF 2001

Q. Were the State's leaders concerned about meeting California's electricity demand in the summer of 2001?

A. Yes, because the Crisis continued in full force as summer 2001 approached. All signs pointed to more gloom and doom, notwithstanding all of the efforts of CDWR, the CPUC, the Legislature and the Governor. Average on-peak spot prices had declined slightly in the fall of 2000, but shot up even higher at the very end of 2000 through the first half of 2001, as shown in Figure 2 above. The ISO declared more system emergencies in each month of December 2000, January 2001, February 2001, and March 2001 than in all of 1998 and 1999 combined, as shown in Figure 3 below, and it

Figure 3: ISO System Emergencies
May 2000 - July 2001



Source data: Exh. No. CAL-245

resorted to rolling blackouts again on March 19 and 20, 2001.[13] When Stage Three Emergencies were declared and rolling blackouts returned on May 7 and 8, 2001, everyone at the state and local level believed that outages in the summer of 2001 were inevitable.

News coverage of the blackouts in March and May 2001 also warned Californians that the Crisis was far from over. ABC's World News Tonight reporters characterized the March 2001 blackouts as a "harbinger" of the spring and summer and warned "the summer is going to be bad." Exh. No. CAL-243A, B (March 19, 2001). The Los Angeles Times reported that "[p]ower officials have warned that this could be a grim summer in California, since demand for electricity sharply rises when people turn on air conditioners." Exh. No. CAL-251 at 1 (*Second day of blackouts disrupts 500,000 homes and businesses*, Mitchell Landsberg and Eric Bailey, March 21, 2001). ABC World News Tonight's coverage of the May 8, 2001 blackouts observed that "[s]ummer may be a month and a half away, but a hot spring is already overloading the state's power grid, a grid so fragile, in just the last two days, it has lost more than 12,000 megawatts of much needed power." Exh. No. CAL-244A, B (May 8, 2001). The New York Times reported that "Irvine's [CA] broad avenues had been transformed into a knot of eight-lane parking lots by a rolling power

[13] In 1998 and 1999 combined the ISO declared eleven Stage One Emergencies, six Stage Two Emergencies, and zero Stage Three Emergencies. CAL-245 at 1.

blackout, just the first of what experts predict will be dozens this summer because of California's power shortages." Exh. No. CAL-251 at 4 (New York Times, *Blackout plans of little help in California's energy crisis*, James Sterngold, May 14, 2001). Other news outlets issued similar warnings throughout May and June 2001. *See id*. at 7 (Los Angeles Times, *Blackout forecasts' dark side*, Jenifer Warren, June 20, 2001) ("It's here. Summer 2001, the blackout season, is only a day away."); Exh. No. CAL-72 at 12 (Los Angeles Times, *Officials warn power outages could cause major sewage spills*, Seema Metha, June 22, 2001) ("Regional water officials are warning sewer agencies … to prepare for rolling blackouts this summer"), *id*. at 29 (Los Angeles Times, *Use of diesel generators proposed to bolster grid*, Gary Polakovic, May 24, 2001).

The Governor was even developing plans to give citizens more notice of future blackouts. On May 24, 2001 Governor Gray Davis issued a press release announcing a plan to help neighborhoods and businesses better prepare for blackouts. Exh. No. CAL-252. Likening blackouts to an earthquake, the Governor proposed to require more advance warning when blackouts were going to occur.

Q. Did the ISO forecast that reliability problems would continue into the summer of 2001?

A. Yes. The March 21 Los Angeles Times article was prescient, because the day after the story broke the ISO issued a 2001 Summer Assessment with just those "grim" predictions. The ISO Assessment warned: "California is facing an electricity shortage of unprecedented proportions for the summer of 2001." Exh. No. CAL-253 at 4 (ISO Summer Assessment, March 22, 2001). The ISO forecast that "there will be a peak demand resource deficiency" ranging from a high of 3,647 MW in June to a low of 666 MW in September 2001 and therefore "California will experience rotating blackouts for periods this summer." *Id.* As a member of the ISO Board of Governors at the time, I can tell you that we were all very worried.

Q. Were there other reports or assessments of the likelihood of further rolling blackouts in the summer of 2001?

A. Yes. Most significantly, on May 15, 2001 the well-respected North American Electric Reliability Council (NERC) issued a special report predicting 260 hours of rotating blackouts in the ISO during the summer, estimating that "the [ISO] will most likely experience supply deficiencies in the range of about 4,500 and 5,500 MW at the time of peak demand for each summer month (2,000 - 4,000 MW more than the [ISO] projections, depending upon the month selected)." Exh. No. CAL-254 at 3-4 (2001

Summer Special Assessment, NERC, May 2001). In prepared testimony for the U.S. Senate Energy and Natural Resources Committee, NERC's general counsel explained:

> As a supplement to its 2001 Summer Assessment, NERC conducted an in-depth independent examination of the expected summer conditions in both California and the Pacific Northwest based on interviews with experts from both the California Independent System Operator [ISO] and the Northwest Power Pool (NWPP). NERC agrees with the overall conclusions of the CAISO that the [ISO] will not have sufficient resources to meet expected demand this summer and that involuntary curtailments of firm customer demand (rotating blackouts) are expected. However, NERC expects those conditions to be more severe than reported by [ISO], in part because the NERC assessment is based on more current information. NERC anticipates that firm demand in California may be curtailed for about 260 hours over the course of this summer, with the average size of the curtailments about 2,150 MW, and as much as 5,000 MW required to be curtailed at peak periods.

Exh. No. CAL-255 at 3 (NERC testimony for Senate Energy and Natural Resource Committee, May 15, 2001). *See also* Exh. No. CAL-256 at 3 (NERC 2001 Summer Assessment, May 2001) ("NERC estimates that deficiencies will be more severe than the [ISO's] expected conditions in its CAISO 2001 Summer Assessment, published on March 22, 2001").

Q. Did the ISO or IOUs have any other tools to reduce demand to avoid system emergencies and blackouts?

A. Yes, but under the extreme conditions the system was exhausting the usual cushion it had in times of short supply: the IOU's ability to interrupt

service, during a Stage Two Emergency, for customers who had elected non-firm service. These "interruptible customers" were industrial and large commercial customers that agreed to have their service interrupted 80 to 150 hours per year in exchange for discounted electricity rates (by about 15 percent). Customers that did not turn off their power when requested were subject to significant penalties.

Up until 2000, interruptible customers had their service interrupted only very infrequently. But starting in the summer of 2000 and through the winter of 2000 – 2001 the IOUs had to call on these businesses repeatedly. By January 2001 the ISO and the IOUs could no longer count on interruptible customers as a way to reduce demand when sellers offered insufficient supply – a fact that the ISO and NERC both recognized. A trade press report on an ISO briefing to the ISO board of governors on May 21, 2001 observed that "[t]he ISO also appeared to be worried that utility load curtailment programs will offer little relief over the summer" because users participating in interruptible programs "have already reached or are close to their maximum number of curtailments." Exh. No. CAL-72 at 1-2 (Electric Utility Week, *ISO predicts tough summer in Calif., as hot, dry weather reigns in region*, May 21, 2001). The NERC Special Summer Assessment stated that "[the interruptible demand program in northern California was exhausted early this year as the [ISO] operators were forced

to call upon interruptible customers to counteract the high unavailability of generating resources during the 2000/2001 winter." Exh. No. CAL-254 at 5. In the general 2001 Summer Assessment NERC concluded "[d]ue to the reduction of available interruptible loads this summer compared to last summer, there is a greater likelihood that more firm load curtailments will be required this summer compared to last summer." Exh. No. CAL-256 at 31.

Without government intervention the electric power system in California would have completely collapsed. But even with the State financing the inflated wholesale power costs, as the summer 2001 approached, further blackouts seemed inevitable.

Q. **How did system emergencies and blackouts affect the citizens and businesses of California?**

A. The toll on Californians' health and welfare due to the ongoing system emergencies and blackouts was immediate and immense. Let me be clear, the blackouts did not just mean that workers left the office early or that tourists avoided San Francisco (which they did). National and local news reports vividly illustrated the serious human and economic toll of the shocking failure of the bulk electric system in California. For example, on January 24, 2001, ABC's evening news program Nightline aired footage of traffic accidents at intersections when stoplights went dark, small children

being trapped in dark elevators, and major businesses raising the specter of relocating out of state. Exh. No. CAL-242A, B (video and transcript).

On May 8, 2001, the second of two consecutive days of blackouts, the Los Angeles Times reported on disabled people who feared the life-threatening impacts of losing electricity to power their life-saving machines, including a disabled woman who said, "I spend my days worrying.… I worry over when the next blackout will come. … Let me tell you, this is no way to live." Exh. No. CAL-72 at 7 (Los Angeles Times, *Blackouts mean more than inconvenience for disabled*, John M. Glionna, May 8, 2001). Doctors voiced concerns for the elderly, who are especially vulnerable to heat and whose health is at risk when air conditioning fails. Dr. J. Michael Leary, an emergency physician in Rancho Mirage, described the risks in particular for seniors on fixed incomes living in mobile homes, some of which are "poorly insulated boxes that turn into ovens under the brutal summer sun. Take away the air conditioning and the humans inside start baking, quick." Exh. No. CAL-251 at 8 (Los Angeles Times, June 20, 2001). Dr. Leary concluded his concerns by predicting that for the coming summer, "I think we'll see a great toll in human suffering, even mortality." *Id.* at 9.

The local press in Newport Beach, California, also reported how the blackouts caused lost work and sales for local businesses and left a health

clinic unable to serve patients. *Id*. at 13-14 (The Daily Pilot, *Blackouts darken parts of Newport Beach*, Paul Clinton and Deepa Bharath, May 8, 2001). California's agricultural industry feared that blackouts could lead to the destruction of perishable food products as the summer harvest approached. As one tomato processor explained, canning operations could become contaminated if the plant's temperature controls failed, and "unexpected power losses could mean economic ruin in a matter of days," not only for them, but also for the tomato farmers who were waiting to sell their harvests to the plant. *Id.*at 9 (Los Angeles Times, June 20, 2001).

I reference these news reports because they bring to light how everyday citizens and businesses were enduring the Crisis months after the Governor's Emergency Proclamation, when CDWR was the only thing that stood between electrical reliability and chaos. Dr. Peter Berck also presents a detailed examination of the costs to California's consumers and the economy from the blackouts in his direct testimony.[14]

Q. How did the public react to the ongoing crisis conditions?

A. The unreliability of electricity service and the impossibly high cost of electricity dominated the attention, activities, and financial concerns of California citizens, businesses, and every level of government.

[14] Prepared Direct Testimony of Dr. Peter Berck on Behalf of the California Parties, Exh. No. CAL-666.

For example, on May 24, 2001 the Public Policy Institute of California (PPIC) issued results of a special statewide survey on growth, which confirmed what I already suspected: that California's electricity problems had become the most important issue to California citizens and their government. According to the report, which included a special section dedicated to California's Electricity Problems, "Californians have electricity very much on their minds. Forty-three percent named electricity price, supply, and demand as the most important state issue. In the three-year history of the PPIC Statewide Survey, no other issue has been named the top problem by so many Californians." Exh. No. CAL-257 at 21 (PPIC Statewide Survey: Special Survey on Growth May 2001). Electricity had surpassed schools and education, which for the prior two years "had been the top issue on residents' list of concerns." *Id.* The survey also explained that the public concern was rising:

> Will electricity problems today hurt the state's economy in the next few years? Eighty-six percent think it will. Sixty two percent believe the effect on the economy will be severe and 24 percent believe it will be modest. Again, public concern is increasing over time: In January, 56 percent said electricity problems would hurt the economy "a great deal."

Id. at 22. In this atmosphere, there was an enormous strain on government agencies like CDWR and the CPUC, whose decisions to manage the Crisis would seriously affect the state over the next decade or more.

Q. Did CDWR need to execute long-term contracts with power sellers in 2001?

A. Yes. Two overwhelming problems dominated California at the time: how to continue to pay the soaring costs for wholesale power in the Spot Markets in 2001, and predictions of continuing outages in the summer of 2001. No one knew how long the Crisis would last – all signs pointed to continued system emergencies and blackouts – or how California could continue to pay for it. My colleague at TURN, Nettie Hoge, put it well when she said, "[t]hey are giving us the choice of darkness or higher rates. . . . In fact, we're going to get both." Exh. No. CAL-251 at 17 (SF Gate, *Blackouts alone could cost billions*, Sam Zuckerman, April 21, 2001). When evaluating whether to sign long-term contracts in May through July, CDWR's ability to provide stability to the supply of power was a major factor that had to be considered. Signing long-term contracts effectively mortgaged California's future for decades, but we had to do it to reduce exposure to the Spot Markets.

IV. RECOVERING CDWR'S COSTS INCURRED DUE TO THE CRISIS

Q. Are you personally familiar with how CDWR paid for the CDWR Long-Term Contracts and how the costs were in turn collected from California consumers?

A. Yes. I participated in the process to deal with the huge bill from the Crisis at several levels. For example, I participated legislatively in the creation of SB 7X, which on January 19, 2001 directed CDWR to begin buying electricity to sell to retail customers and appropriated $400 million from the State's General Fund for this purpose, and AB 1X, the February 1, 2001 statute that both granted CDWR the authority to enter into long-term contracts and prescribed how the cost of that power would be repaid to CDWR.[15] My employer, TURN, was a party to virtually all of the CPUC proceedings related to how ratepayers would pay for the power provided by CDWR. I participated in the 2001 proceedings to increase rates by one cent, then an additional three cents per kilowatt-hour (kWh), and to design rates to pay for the cost of procuring wholesale power.

Q. Are California ratepayers required to pay CDWR for its costs incurred under the CDWR Long-Term Contracts?

A. Yes. All of the money that CDWR has paid related to the Long-Term Contracts is the direct responsibility of California ratepayers. AB 1X requires the IOUs' retail customers to pay CDWR for the power they receive from CDWR: "[u]pon the delivery of power to them, the retail end

[15] SB 7X is contained in Exh. No. CAL-14 and AB 1X is contained in Exh. No. CAL-15.

use customers shall be deemed to have purchased that power from the department. Payment for any sale shall be a direct obligation of the retail end use customer to the department."[16]

Q. How have ratepayers paid for the costs of energy purchases during the Crisis, including costs incurred under the CDWR Long-Term Contracts?

A. Californians have paid CDWR for its costs incurred during the Crisis and under the Long-Term Contracts through a mix of revenue streams, including:

- the initial rate increases in 2001, which paid for part of CDWR's costs to procure wholesale power in 2001 and 2002 from both Spot Market purchases and under the Long-Term Contracts;
- the CDWR Bond Charge, which spreads out over 20 years, from 2003-2022, recovery from ratepayers of the remainder of wholesale power procurement costs CDWR incurred in 2001 - 2002 that were not fully collected from IOU consumers in 2001 - 2002 through the initial rate increases; and
- the CDWR Power Charge, which from 2003 through 2015 has provided the mechanism by which CDWR recovers its ongoing annual revenue

[16] Cal. Water Code § 80100 – 80122.

requirement related to power procurement under the Long-Term Contracts.

Under these mechanisms, every penny of overcharges has already been collected, or will be fully paid by the individual ratepayers of California by the time Bond Charge ends in 2022. And every payment by consumers toward the overcharges is money that is not spent on other goods or services, or saved. For an individual consumer, it might be a gallon of milk forgone; for the overall economy it was and is the loss of jobs and slower economic growth. Dr. Berck further describes these kinds of impacts in his direct testimony.[17]

Q. Please describe the initial rate increases in 2001 that were used to pay for CDWR's power costs.

A. First, on January 4, 2001, the CPUC approved a one-cent per kWh increase to PG&E's and SCE's customers' electric bills, applied on a usage basis, in response to emergency requests for rate increases by PG&E and SCE in November 2000.[18] The surcharge resulted in an increase of approximately 9 percent for residential customers, 7 percent for small business customers, 12 percent for medium commercial customers, and 15 percent for large

[17] Prepared Direct Testimony of Dr. Peter Berck on Behalf of the California Parties, Exh. No. CAL-666.

[18] *CPUC Interim Opinion Regarding Emergency Requests for Rate Increases* (2001) D.01-01-018. This is the same rate increase I describe in Section II above.

commercial and industrial customers.[19] While intended to be a temporary surcharge only, the CPUC concluded that it had to take action because "[t]here are no easy choices before us. Since mid-June [2000], we have seen prices in the wholesale electricity market skyrocket to staggering levels as a result of the severe dysfunction of the California wholesale electricity market."[20]

Just weeks later the IOUs became insolvent, Governor Davis proclaimed a state of emergency, and CDWR had to begin purchasing the Net Short. But the rate increase remained in place and was soon used to help fund CDWR's power purchases, both in the Spot Markets and when deliveries began under the CDWR Long-Term Contracts.

Q. Was the one-cent per kWh rate increase enough to cover CDWR's ongoing power procurement costs in 2001?

A. No. Less than three months after it approved the one-cent rate hike for PG&E and SCE customers, on March 27, 2001, the CPUC approved an additional three-cent per kWh surcharge for power procurement. This was in addition to the "interim" one-cent surcharge approved on January 4, 2001, an increase which the decision also made permanent.[21]

Discussing its decision to levy the new three-cent surcharge, the

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19 *Id*. at 2.
20 *Id.* at 7.
21 *CPUC Interim Opinion Regarding Proposed Rate Increases* (2001) D.01-03-082.

CPUC stated that an increase in retail electric rates was necessary because uncontrolled price increases in the wholesale markets since November and December 2000 had created enormous outstanding liabilities for PG&E and SCE: "SCE's and PG&E's continued financial viability and ability to serve their customers has been seriously compromised by the dramatic escalation in wholesale prices."[22] The CPUC concluded, "whether or not the power sellers' actions are lawful, and whether or not we approve of those actions, without a rate increase it will become increasingly difficult to keep the lights on in California."[23]

Q. How did the three-cent per kWh increase impact customers' rates?

A. The IOUs began recovering the three-cent surcharge from customers on June 1, 2001, after the CPUC approved a rate design to allocate the three-cent per kWh rate increase among PG&E and SCE's customers.[24] Rather than apply the three-cent per kWh surcharge equally on a usage basis, the CPUC adopted varying rates for different customer classes and instituted a tiered rate structure within the residential class. The decision included the following graphs comparing the average increase by customer class to the then-current rates, as follows:

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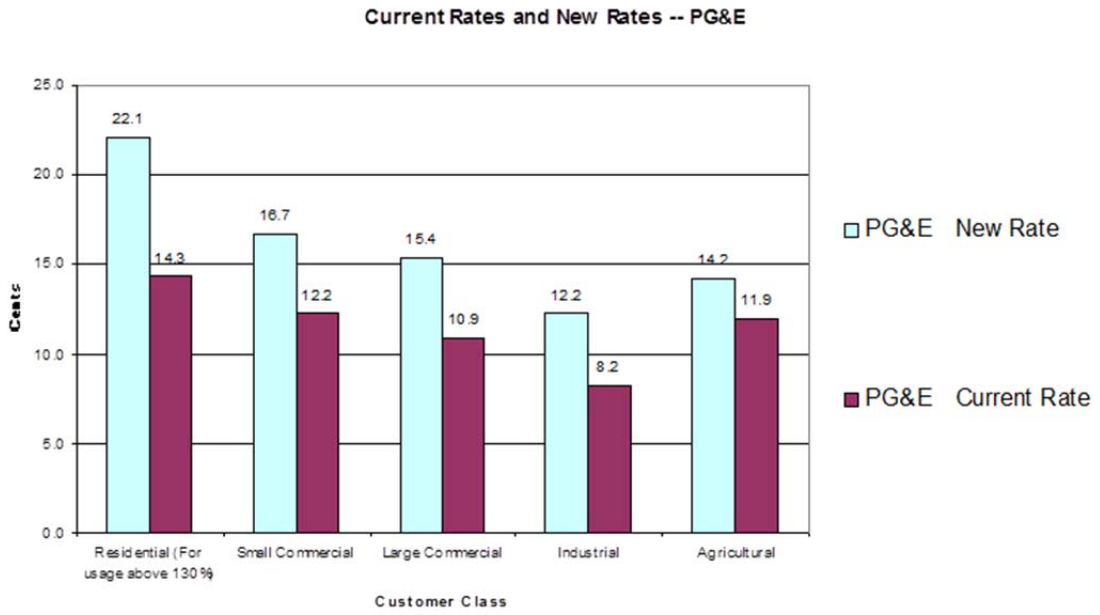
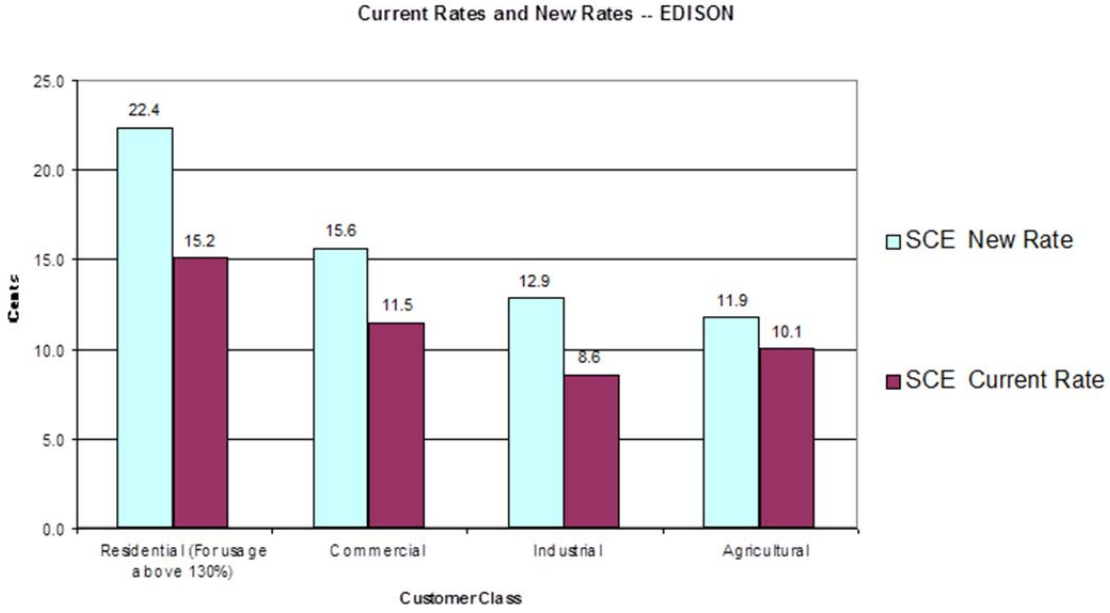
[22] *Id.* at 4.
[23] *Id*. at 14.
[24] *CPUC Interim Opinion Regarding Rate Design* (2001) D.01-05-064.





Source: *Interim Opinion Regarding Rate Design* (2001) D.01-05-064 at 6-7 (for rates effective June 1, 2001).

But even as it approved the rate increases, the CPUC noted that the increase in average rates did not reflect the <u>full costs</u> of the Crisis, and that

"the real cost of electricity provided by [CDWR] will be financed through the issuance of long-term bonds that will be repaid over time by ratepayers."[25] The CPUC explained that "[i]f the rates were set at the actual cost of energy consumed, the increases allocated among customers today would be substantially higher."[26] This reasoning reflected the lesson I learned from the situation in the summer of 2000 in San Diego, that a direct pass through of all actual costs would too be destructive to individuals, businesses, and the California economy as a whole.

Q. Did the CPUC also approve rate hikes in 2001 for SDG&E's customers?

A. Yes, although the increase occurred later than for PG&E and SCE's customers. In September 2001 the CPUC approved system-average retail rate increase for SDG&E of 1.46 cents per kWh, or 12.1 percent, to implement a 9.02 cents per kWh CDWR charge for SDG&E's customers.[27] The CPUC also adopted a tiered residential rate structure generally similar to the structure adopted for PG&E and SCE.

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[25] *Id*. at 8.
[26] *Id.*
[27] *CPUC Interim Opinion Adopting Rate Increases to Implement the Department of Water Resources' Revenue Requirement* (2001) D.01-09-059.

Q. How were these rate increases used to pay for CDWR's power purchases?

A. First, in January 2001 the Legislature directed the CPUC through SB 7X to implement emergency regulations governing (1) the utilities' collection of customer payments for power sold to the customers by CDWR, and (2) the remittance of the moneys so collected to CDWR.[28] The CPUC implemented SB 7X and ordered SCE and PG&E to collect sums owed by retail end-use customers in trust for the benefit of CDWR, and to make monthly payments to CDWR.[29] It also established principles that provided an enduring framework governing the financial responsibility of ratepayers for electricity purchased on their behalf by CDWR, including terms for calculating the ratepayer obligations to CDWR. For example, it established a "DWR Price" that DWR was to recover for power, equaling the amount DWR pays for electric power, plus any associated administrative costs, transmission and scheduling costs, and other related costs, minus overpayments recovered from sellers (including payments received to settle claims of overcharges in the Spot Markets and under the CDWR Long-Term Contracts).

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[28] Exh. No. CAL-14.

[29] *CPUC Interim Order Adopting and Implementing Emergency Regulations for Delivery and Payment Mechanisms Relating to the Sale of Electric Power Purchased by the Department of Water Resources* (2001) D.01-01-061.

Then on March 27, 2001, the same day it approved a three-cent increase for PG&E and SCE customers, the CPUC issued a decision implementing methods to ensure that CDWR would be paid for the power it was purchasing and delivering to retail customers and allocating cost recovery for CDWR's purchase among the customers of the three IOUs.[30] The CPUC set a generation-related rate component for retail sales and ordered each utility to segregate and hold in trust for CDWR an amount equal to the number of kilowatt-hours that CDWR provided, multiplied by the company-wide average generation-related rate.[31] Accounting for both the one-cent and three-cents per kWh surcharges, the generation rates became:

- 9.471 cents per kWh for PG&E,
- 10.277 cents per kWh for SCE,
- 6.5 cents per kWh for SDG&E capped customers, and
- 12.539 cents per kWh for SDG&E uncapped customers.[32]

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[30] *CPUC Interim Opinion Implementing Legislation Allowing the State to Provide Electricity that its Utilities are Unable to Provide* (2001) D.01-03-081.

[31] D.01-0-081 at 14-17. The company-wide average generation rates approved in this decision reflected only the one-cent surcharge from January 2001, however, and not the additional three-cent surcharge approved by the companion case, D.01-03-082.

[32] D.01-03-082 at Ordering Paragraph No. 1 and D.01-03-081 at Ordering Paragraph No. 1.

Q. So far you have been describing the initial rate increases in 2001 used to pay for the Crisis, is that correct?

A. Yes.

Q. How has CDWR recovered procurement costs incurred during the Crisis and ongoing Long-Term Contract costs since 2001?

A. In February 2002 the CPUC approved a rate agreement between CDWR and the CPUC that established two streams of revenues for CDWR.[33] Under this framework ratepayers would (1) pay back the balance due on the astronomical costs that CDWR had racked up in the Spot Markets and under CDWR Long-Term contracts in 2001and 2002 through Bond Charges to be assessed starting in 2003 and continuing until 2022, and (2) shoulder the ongoing burden of the Long-Term Contracts costs through the Power Charges – a separate charge established annually for CDWR-supplied electric power. Both streams of revenue were necessary for CDWR to issue bonds with investment-grade ratings.

Q. **Please describe the CDWR Bond Charges.**

A. The Direct Testimony of John Pacheco describes the Bond Charges in greater detail,[34] but the main point I want to make here is that the Bond Charges repay CDWR for part of its power procurement costs incurred

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[33] *CPUC Opinion Adopting a Rate Agreement between the Commission and the California Department of Water Resources* (2002) D.02-02-051.

[34] Prepared Direct Testimony of John Pacheco on Behalf of the California Parties, Exh. No. CAL-214 at 10-14.

under Long-Term Contracts (including the Shell and Iberdrola Contracts) from 2001 through December 2002 and in the dysfunctional Spot Markets. The Bond Charges are applied equally on all kWh of customers' usage from 2003 through 2022, when ratepayers will finally repay CDWR for its expenditures incurred on California's behalf in 2001-2002.

Q. Please describe the CDWR Power Charges.

A. The Power Charge is applied separately to CDWR's power deliveries under the Long-Term Contracts to all customers. It is designed to pay for the ongoing current costs of power deliveries and other costs associated with the Long-Term Contracts.[35]

The CPUC determined that ratepayers would incur a separate charge for CDWR electric power in its decision approving a final revenue requirement for CDWR from January 17, 2001 (when CDWR first began to procure power) to December 31, 2002.[36] The CPUC allocated responsibility for CDWR's revenue requirement among the customers of PG&E, SCE and SDG&E; established a fixed retail rate per kWh for each IOU's ratepayers for CDWR power; and ordered each utility to begin disbursement of proceeds to CDWR at these rates, as required by their respective servicing agreements or CPUC order. The charges adopted for

[35] D.02-02-051 at Finding of Fact No. 28 ("The proposed Rate Agreement describes Power Charges as charges imposed by the Commission on Retail End Use Customers for Power deemed sold by DWR.").

[36] D.02-02-052 at Ordering Paragraphs Nos. 1-5.

CDWR power were:

- 9.211 cents per kWh for PG&E,
- 9.706 cents per kWh for SCE, and
- 7.742 cents per kWh for SDG&E.[37]

These CDWR charges effectively superseded the CPUC's earlier interim orders providing for the IOUs to remit payment to CDWR. Although this Decision did not change retail rates,[38] the fixed per-kWh rates established for CDWR-supplied power were effectively the first form of the Power Charge, and were to remain in effect for each utility from March 15, 2002 through December 31, 2002, by which time the CPUC expected to have approved a new revenue requirement and Power Charge for 2003.[39]

In determining how to collect revenues from IOU ratepayers for remittance to CDWR, the CPUC noted that although it generally sets the overall electric rate that IOU customers see on their bills, in this case parties agreed that breaking out a charge to reflect a separate amount per kWh sold by CDWR would make the rate structure more efficient.[40]

CDWR explained that the charges set for recovery of its revenue

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[37] D.02-02-052 at Ordering Paragraph No. 3 (as modified by *CPUC Order Modifying D.02-02-052 and D.02-03-003 and Denying Rehearing of these Decisions, as Modified*, (2002) D.02-03-062).

[38] D.02-02-052 at 5, 101 ("In today's decision, we make no changes in the existing overall rate levels being charged to end-use customers of the three utilities.")

[39] *Id*. at Ordering Paragraph No. 4.

[40] *Id.* at 89.

requirement should be "independent of rates payable by retail end use customers for power purchased by such customers from the utilities," and that the revenues resulting from CDWR's rates should be measured as a function of the amount of power sold by CDWR, not as a function of the amount of power sold by each respective utility. The CPUC agreed that "it is reasonable to implement [CDWR] cost recovery as an amount per-kWh that is attributable to sales by [CDWR]" because the approach "facilitates the independent calculation of charges that will be segregated and remitted directly to [CDWR]."[41] The companion CPUC decision approving the rate agreement also found sufficient statutory authority for the section of the rate agreement "which states that the Commission shall establish Power Charges and Bond Charges without regard to the rates or charges for electric power sold by Electrical Corporations."[42]

Q. Since 2002, has CDWR continued to collect its revenue requirement to service the bond debt and administer the CDWR Long-Term Contracts through the Power and Bond Charges?

A. Yes. The amount of the Power and Bond Charges varies each year as needed to meet CDWR's total revenue requirement for its portfolio of Long-Term Contracts and to service the bond debt, but the CPUC's 2002 decision adopting a separate charge for CDWR electric power established

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41 *Id*. at 90.

42 D.02-02-051 Conclusion of Law No. 17.

an enduring model that has remained in place ever since.[43] The CPUC issues an annual CDWR revenue requirement allocation decision that sets the Power Charges and Bond Charges for the following year for each IOU and thereby closes a rate setting proceeding that starts when CDWR submits its annual revenue requirement to the CPUC.

Q. How is the Power Charge calculated?

A. In simplified terms, CPUC calculates the Power Charge for each IOU by (1) allocating a portion of CDWR's total revenue requirement for the next year to each IOU, (2) making adjustments (to account for balancing and other adjustments), and (3) dividing that dollar amount by expected CDWR energy deliveries to that utility's customers for the year. Exh. No. CAL-258 is a copy of the CPUC's Order Allocating the 2007 Revenue Requirement Determination of CDWR and illustrates this process.[44] The approved Power Charge rates are still subject to possible adjustments by the IOUs, which would be reflected in Advice Letters filed with the CPUC each year by the utilities. The Advice Letters reflect the actual Power Charge charged to customers, if different from the amount specified in the annual revenue requirement allocation decision.

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[43] D.02-02-052.

[44] *CPUC Order Allocating the 2007 Revenue Requirement Determination of the California Department of Water Resources* (2006) D.06-12-035.

Q. What are the Bond Charges and Power Charges consumers have paid to CDWR from 2002 to the present?

A. Table 1 shows the CPUC-approved Bond Charges from 2002-2014 and Table 2 shows the Power Charges from 2003-2014. Supporting detail is provided in Exh. No. CAL-259, including citations to relevant CPUC Decisions and utility Advice Letters. In some years the CPUC approved multiple Power Charges or Bond Charges throughout the year, reflecting either modifications to the CDWR revenue requirement or to the allocation among IOUs for that year.

Table 1: CDWR Bond Charges, 2002 - 2014

Year	PG&E (cents / kWh)	SCE (cents / kWh)	SDG&E (cents / kWh)
2002	0.52500	0.52500	0.52500
2002	0.70100	0.70100	0.70100
2002	0.51300	0.51300	0.51300
2003	0.44400	0.44400	0.44400
2004	0.49300	0.49300	0.49300
2005	0.45900	0.45900	0.45900
2006	0.48500	0.48500	0.48500
2007	0.46900	0.46900	0.46900
2008	0.47700	0.47700	0.47700
2009	0.49118	0.49100	0.49100
2010	0.51500	0.51500	0.51500
2011	0.50500	0.50500	0.50500
2012	0.51300	0.51300	0.51300
2013	0.49300	0.49300	0.49300
2014	0.51300	0.51300	0.51300

Table 2: CDWR Power Charges, 2003 - 2014

Year	PG&E (cents / kWh)	SCE (cents / kWh)	SDG&E (cents / kWh)
2003	10.469	10.413	10.301
2003	10.524	10.467	10.354
2003	9.353	9.475	9.432
2003	8.481	10.287	10.114
2004	7.910	9.531	8.814
2005	7.358	8.087	7.816
2005	5.214	7.981	7.621
2006	8.345	10.509	8.142
2007	8.750	9.490	5.823
2008	6.932	8.875	10.199
2008	7.123	8.614	9.395
2009	8.640	8.451	10.416
2009	12.754	6.697	11.004
2010	23.139	3.763	6.112
2011	8.045	3.952	4.989
2012	8.475	(0.590)	4.083
2013	24.341	(0.097)	12.327
2014	25.802	(0.037)	(0.152)

* Negative Power Charge rates reflect the issuance of refunds to customers and are due to the impact of reductions to CDWR's operating accounts, including priority contract accounts, or settlement payments for overcharges under the long-term contracts.

Q. Do ratepayers see the Power Charge and Bond Charge on their utility bills?

A. Yes. Exh. No. CAL-260 shows an SCE customer bill from April 2007. Exh. No. CAL- 261 shows an SDG&E customer bill from October 2006. These sample historic bills illustrate how month after month, year after year, Californians have kept paying the costs of the CDWR Long-Term Contracts.

The Bond Charges are generally shown as a separate line item on bills for each utility. For example, the October 2006 SDG&E bill shows that the customer paid $5.37 for the CDWR Bond Charge (0.485 cents per kWh on total usage of 1,109 kWh). Exh. No. CAL-261. The March, 2007 SCE bill shows that the customer paid $1.91 (0.469 cent per kWh on total usage of 408 kWh). Exh. No. CAL-260.

The utilities have not been required to show the total amount charged for CDWR power as a separate line item on customers' bills.[45] In general, however, SCE has shown the CDWR generation cost as a separate line item from the SCE generation cost, while SDG&E and PG&E show the rate paid for the portion of power provided by CDWR (*i.e.*, the Power Charge). For example, the April 2007 SCE bill shows the customer paid $9.59 for CDWR power (9.490 cents per kWh assessed 101 kWh usage), and $5.82 for SCE-delivered power (tiered rates assessed on the remainder 307 kWh usage). Exh. No. CAL-260. The SDG&E customer bill does not break out CDWR energy separately from energy provided by SDG&E, but does provide the following notice at the very bottom of the bill:

> **Your electric energy charges include charges for that portion of your energy usage provided by the Department of Water Resources (DWR). SDG&E collects charges for power provided by DWR as an agent of DWR. DWR is collecting 8.142 cents for each kWh it provides.**

Exh. No. CAL-261.

[45] D.02-02-052 at 90, n.43.

V. THE CONSUMER IMPACTS OF THE 2001 RATE INCREASES

Q. How did ratepayers respond when the CPUC approved the one-cent increase in 2001 in response to the rise in wholesale power costs?

A. During my many years at TURN and also now as a Commissioner of the CPUC, I cannot overstate how electric rate increases affect everyday people. For people living close to the margin, as so many are, they desperately try to keep their electric usage down, and a rate increase can be the straw that breaks the camel's back. The burden and outrage ratepayers felt from the one- and three-cent rate hikes can best be understood by their own words, in letters and emails the CPUC received, which are kept in the CPUC's correspondence files for the proceedings (A.00-10-028, A.00-11-038, and A.00-11-056).

Among the many similar complaints and pleas that the CPUC received from California ratepayers in late 2001 and early 2002 was the following email from a senior living on a fixed income:

> Dear Sirs:
>
> I have written before about the possibility of extreme hardship for seniors in all electric houses. It has now come to pass. This last bill was the first of the cold season and I find my bill has increased $100 over last year's bill.
>
> As I claimed before, those of us with all electric homes (no other way to heat, cook, wash and dry cloths, [sic] etc) are being put in a very unfair position. We are in our homes almost 24 hours per day as we no longer work or eat most of our meals out.…

> My bill this month (including seasonal discount) is still $248.36. [T]his is 2/3 of my social security check. Heaven knows what people who have no other income besides social security are doing. We are not poor enough to get relief through your CARE program, nor rich enough to absorb the raise in utilities (all utilities have gone up).
>
> I would like to add that not only do we have solar hot water, but we completely insulated our walls and cielings [sic] last summer. We use fluorescent bulbs and turn the heat on only when we cannot take the cold any longer. All this to no avail.
>
> Is there any relief planned for in the future, or must we sell our present home which we have been in for 30 years and look for one powered by gas? By the way, we have only 1500 sq ft of living space (two bedrooms). This is not a mansion.

Exh. No. CAL-262 at 1 (Consumer Complaints to CPUC, January 25, 2002 9:54 a.m. email).[46]

An SCE customer also complained about the rate increases, writing,

> I live in a modest sized two bedroom mobile home… I'm greatly concerned with the recent sharp increase in electric prices forced on consumers. My electric use is modest; I turn off appliances and lights when not in use, and my air conditioner is set on 80°….
>
> I have lived in a three bedroom air conditioned houses in the Midwest, and I've never received a monthly electric bill for $350. I feel that your prices are far too high, and beyond the ability for most consumers to pay. I cannot afford a $350 electric bill every month. There's no way to reduce my electric usage unless I stop cooking altogether on my electric stove, never turn on the lights, and never turn on the TV or the computer.…

[46] Customers' personal information (name, address, email, phone numbers) have been redacted from the correspondence shown in Exh. No. CAL-262.

> I hope that the PUC will take a closer look at these insane high prices and produce electricity that is affordable to the average consumer.

Id. at 2 (October 10, 2001 letter).

Q. What other concerns did ratepayers express in their communications to the CPUC regarding the impact of the rate increases?

A. The CPUC received hundreds upon hundreds of letters and emails around the dates when the CPUC approved the three-cent rate increases and the rate design decisions, which appear in the correspondence files. In many of these complaints ratepayers said their existing bills were already too high to shoulder even before the rate increases, despite already reducing their electric consumption as much as possible. Many people wrote with fears that rate increases would leave them unable to afford basic necessities, including senior citizens who expressed concerns that they would not be able to live on fixed incomes and pay all of their bills. One expressed his situation in this very stark way:

> I am a senior living on $700 a month, and I seldom turn on my furnace, although I live in Eureka in northern California and it is cold. My apartment never gets warmer than 68 degrees because I can't afford the current bill. With a 46% increase, I'll have to quit eating.

Exh. No. CAL-263 at 1 (Consumer Complaints to CPUC, March 27, 2001 5:18 p.m. email). [47]

[47] Customers' personal information (name, address, email, phone numbers) have been redacted from the correspondence shown in Exh. No. CAL-263.

Even seniors living in San Diego wrote in, saying:

> Although we know that your agenda today does not apply to SDGE; we are still very concerned. The rate increases we have experienced in San Diego are rapidly dipping into our small savings account. We are struggling to set aside the "adjusted amounts" so that we will be able to make that balloon payment when it comes due. Another rate increase will make that impossible.
>
> We are seniors who live on a fixed income with no way to supplement that income.… We are terrified at a time in our lives when we should be able to grow old gracefully and without fear that we will be unable to heat our home in the winter and cool it in the summer. FYI, during this past winter, we woke up in the morning to 53 degrees in the house. During the past summer, outside temps rose to 100.
>
> Please do something to give us relief.

Id. at 2 (March 27, 2001 8:05 a.m. email).

Another family described the lengths to which they had gone to reduce their electricity consumption and still their current bill, without the increase, was a burden:

> When it was so cold over the last two months we were afraid to turn on the heat, so we lived in a house that hovered around 58 degrees. We ate late dinners, 8 PM, and did laundry after 8PM and before 8 AM, and we still had a bill of $249 in one month. That may not seem like much, but when you have a car payment and a house payment, and property tax, and food and bridge tolls, and a special needs kid that has to get to a special school and be picked up that's 27 miles away, a $249 utility bill is a heck of a lot! And a 40 percent rate hike is nothing of the sort. It's a multiple of that. Gas stations, grocery stores, any one that serves the community will up the cost, and that cost in total will be considerably larger than a 40% rate increase in our pocket books.

Id. at 3 (March 26, 2001 11:10 p.m. email).

A stay at home mother of two described frustration at how the increases would affect her family, which had done everything possible to conserve electricity to the point that:

> I do not know how else we could cut back. We do not use any lights until 7:00 at night. I do the laundry once a week, I use the shortest wash cycle and I hang dry all but the white clothes. We only use the dishwasher twice a week and we use fans to circulate the air when the temperature is below mid-nineties. Our only luxuries are the tv and the computer.…
>
> The money you take from us with these increases takes away money from my family to live on. As usual we make too much to qualify for assistance (38,000 yr. for four) but not enough to pay for all these increases. You are robbing the public.

Id. at 4 (May 3, 2001 12:28 p.m. email).

Another customer illustrated that the existing rates were too high by reciting her past bill amounts and then concluding,

> We used to keep our mobile home at 68-70 now we keep it at 62, I visit my neighbors in this senior mobile home park and they are sitting around in their jackets.

Id. at 5 (March 27, 2001 4:31 p.m. email).

Another common theme conveyed people's fears that they would be forced to leave their homes. One single mother of three wrote:

> I just recently moved into a home with my children, a dream come true.… I am concerned that with the rising utility rates I will not be able to provide my children with this home and the basic necessities of life, food, shelter, heat and light.…

> I work part-time, and attend school full-time to provide a better future for myself and my children. The future was just starting to look bright for us. Please don't make it dark again.

Id. at 6 (March 27, 2001 6:18 a.m. email). Another customer put it more even starkly, writing that a "rate increase from our [SCE] bill every month would put in jeopardy whether or not we are able to keep our home. It just doesn't seem right that the harder we work for the [A]merican dream the harder it is to fulfill it." *Id*. at 7 (May 5, 2001 8:43 p.m. email).

Even people who were not struggling to make ends meet day-to-day wrote of concerns that the increases would harm the middle class, despite significant efforts to conserve:

> The comments about encouraging residents to conserve is insulting. Everyone I know has gone without heat, lights and many comforts because our bills were already so high. You have raised the rates to a point many of us are truly concerned about being able to pay for power.…
>
> You are forcing some users to be subject to disconnection of service because there is no way they will be able to afford power. Low income programs do exist but what about the middle income working families that will clearly suffer do [sic] to these rate increases.

Id. at 8 (March 28, 2001 12:33 p.m. email).

Another angry ratepayer commented on the additional burden of caring for a family member caused by the increase, saying "I have a family member who requires air filtration and medical nebulization to maintain some resemblance of a normal life. I have no choice but to pay it. This rate

hike will eat up my salary raise for the year." *Id*. at 9 (March 7, 2001 12:41 a.m. email).

Other citizens wrote of concerns that rising costs, including power, would drive them out of California altogether, including one customer who was already looking for new employment elsewhere:

> I am the head of a household with a single source of income. My wife stays home to care for our 3 children. … We have been conserving energy for years, shutting off lights, burning wood in the fire place, just so we could afford to maintain our standard of living. It's getting to the point where the increases in expenses are too much to bear and keep up with. I am looking for new employment out of California and have recommended to the compoany [sic] to re-locate the office to Houston. I've had enough of this mess and just want out.

Id. at 10 (March 27 12:30 p.m. email).

Customer P.R. also raised the specter of leaving his home:

> We recognize whole heartedly the state's dilemma, but if rates continue to rise as they've done in recent past months combined with the power outages floating from community to community, the prospect of leaving my home state, my community in which I am recognized and respected, an environment in which I would otherwise love to start and raise a family, warrants more and more thought.

Id. at 11 (March 26, 2001 8:04 a.m. email).

Q. What do these stories tell you?

A. These rate hikes needed to pay for <u>just a portion</u> of the inflated wholesale electricity prices were already breaking the backs of California ratepayers. California citizens had to endure significant hardships that no modern economy should demand. No one should have to choose whether to

continue to live in their home or move to another state because of the price of electricity. And these rate increases were just the tip of the iceberg compared to the total burden California's citizens have endured for more than a decade through Power Charges and Bond Charges: the harm to consumers of the rate increases caused by the massive market manipulation and the Long-Term Contracts at issue here continued well after the Crisis ended.

Q. Did the CPUC only receive complaints from residential customers?

A. No, large energy users also complained about the impacts to them, and the California economy in general, caused by the rate increases. For example, the California Industrial Users group (CIU) met with CPUC Commissioner Brown in September 2001 about D.01-05-064. The meeting was reported in a Notice of *Ex Parte* Communication filed with the CPUC, marked as Exh. No. CAL-264, which is contained in the correspondence files for proceeding A.00-10-028, and which I would have received and reviewed at the time. At the meeting, CIU member representatives from BOC Gases, Air Liquide America Corporation, and Anheuser-Busch Companies told of the monetary impacts of the CPUC's decision on their companies. *Id.* at 3-4.

The CIU also provided a package of written materials, including a presentation that described the significant percentage increases in rates on

large industrial users in 2001 over 2000 rates, *id.* at 6-13, and a news article reporting on businesses that had folded in light of their power bills, *id.* at 14-16. The article told of Shasta Paper Company, which laid off 400 workers on August 20, 2001: "One of the leading employers in Northern California's timber country, the colossal paper mill folded after its monthly Pacific Gas and Electric Co. bill jumped to about $1.3 million, a $500,000 increase.... Energy 'was the final piece,' said plant manager Mal Bellafronto. 'We just couldn't do it.'" *Id*. at 13 (Sacramento Bee, *Power prices a drain on jobs: As manufacturers retrench, observers wonder if it's a trend*, Dale Kasler, September 6, 2001).

The *ex parte* meeting package also included two "Energy Casualty Reports" from August 1 and August 16, 2001, which compiled numerous stories from companies that had already closed facilities, laid off workers, cancelled production, stopped plans to expand, or were considering such measures. These "casualty reports" are filled with grim story after grim story from companies all over California that were suffering from the impacts of the rate increases. *Id*. at 16-30.

Further, even in the midst of the ongoing Crisis in March and April 2001 stories flowed in about the agricultural industry worrying about the strain of absorbing the electricity price increases and the difficulty of remaining competitive. A United States Department of Agriculture report

on rural cooperatives from April 2001 provided stories about these impacts, with the executive of a fruit processing and marketing co-op concluding that "the energy crisis has been disastrous for California agriculture." Exh. No. CAL-265 at 3. The executive observed of the difficulty passing the higher electricity costs onto consumers, noting that "[h]igher costs just might be enough to make a consumer turn away from fruit to eating a Twinkie instead." *Id.* at 5. For the Humboldt Creamery Association, the 15 percent PG&E surcharge (*i.e.*, the one-cent rate hike approved in January 2001) cost the company $15,000 a month. The head of the Association also observed the difficulty of passing increased on the increased costs to consumers: "Sixty percent of our sales are outside of California. My competitors outside of California don't have these problems or these added costs." *Id.* at 5.

VI. THE CONSUMER BURDEN IMPOSED BY THE LONG-TERM CONTRACTS

Q. Please describe how the costs of the CDWR Long-Term Contracts have burdened California's ratepayers.

A. The total dollar impact on IOU ratepayers caused by the Long-Term Contracts equals CDWR's revenue requirement each year (imposed on customers through the Power Charges), plus the portion of the ongoing bond debt payments attributable to Long-Term Contract costs CDWR

incurred in from January 2001 through December 2002 that is being collected through the Bond Charges. Those amounts are enormous.

I understand from the testimony of John Pacheco that California ratepayers paid $37.5 billion (nominal) for the CDWR Long-Term Contracts through December 2014, mostly through the Power Charges.[48] But California's ratepayers are also still paying down the bond debt, which financed the balance of CDWR's power procurement expenses incurred during 2001-2002 that could not be repaid in full with revenues collected from IOU customers under the 2001 rate increases or the initial Power Charges beginning in March 2002 (which I described in Section IV above). Mr. Pacheco identified the portion of bond funding that is attributable to CDWR's Long-Term Contract costs (including Shell and Iberdrola) incurred in 2001-2002, and also separately for the Shell and Iberdrola Contract costs. He also calculated the associated debt service costs for each (annual and total for the life of the bonds). This information is summarized in Table 3 below.

[48] Direct Testimony of John Pacheco on Behalf of the California Parties, Exh. No. CAL-214 at 16.

Table 3: CDWR Long-Term Contract Payments Funded by Bond Issuance and Associated Debt Service

Contract(s)	Portion of bond funding attributable to contract(s)*	Annual debt servicing cost for contract(s)	Total debt servicing costs over the life of the bonds for contract(s)
All CDWR Long-Term	$2.1 billion	$164 million	$3.3 billion
Shell	$160 million	$12.6 million	$253 million
Iberdrola	$66 million	$5.2 million	$104 million
* Portion of CDWR power procurement costs incurred in 2001-2002 that were not repaid by IOU consumer's remittances in 2001-2002 and thus were financed via the bonds.			

Source: Direct Testimony of John Pacheco, Exh. No. CAL-214 at 9-10, 18.

This means that, in total, California's electricity consumers will have paid an additional $1.2 billion just for interest on the$2.1 billion of bond debt attributable to the Long-Term Contract costs CDWR incurred in 2001-2002 that were not paid back fully by IOU customer remittances at the time. Over $131 million of the interest is attributable just to the Shell and Iberdrola Contracts. Consumers pay $164 million annually to service the bond debt. This is an additional, ongoing burden on consumers that must be considered. If the Spot Markets had not been so dysfunctional, CDWR would never have needed to shoulder the huge costs of buying power for Californians in 2001-2002 and the State would not have had to take such extraordinary measures of issuing bonds to spread out repayment of the costs over 20 years.

Moreover, the fact that ratepayers are still paying today for power delivered under the Long-Term Contracts in 2001 – 2002, including the Shell and Iberdrola Contracts, is astounding. The bonds did not finance anything that provided a lasting benefit. Consumers who are paying back principle plus interest today for electricity consumed way back in 2001-2002 may not have even lived in California at the time. This is fundamentally unfair to those consumers. But again, as I and others learned from the in disaster in San Diego in the summer of 2000, it was necessary to spread out the costs CDWR incurred in 2001-2002 over a longer period of time, in order to avoid economic catastrophe that would have resulted from a full pass-through in retail rates of the jacked-up wholesale power rates during the Crisis.

Q. Have customers complained to the CPUC about the CDWR Power or Bond Charges?

A. Yes. The CPUC received complaints about the CDWR charges on customer bills long after the initial rate increases hit in 2001 and after the Crisis ended. For example, records from the CPUC's Consumer Affairs Branch, which receives customer complaints, revealed a complaint about CDWR charges in 2009. An SDG&E customer describes the following "problem":

> 1. Third Party Billing. [CDWR] billing is added to my power bill each month, including [CDWR] Bond.…

> 3. The bottom of my "statement" reads, in-part, "SDG&E collects charges for power provided by [CDWR] as an agent of [CDWR]. [CDWR] is collecting 11.004 cents for each kWh it provides." IS [CDWR] STILL PROVIDING POWER? IF SO, WHY? AND WHO ARE THEY?

Exh. No. CAL-266 (Consumer Complaint, letter to CPUC dated March 15, 2009).[49] The complaint asserted that "the [CDWR] portion of these billings borders on USERY [sic, usury]." *Id*. at 1.

Q. Can customers escape paying for the CDWR Power and Bond Charges by switching their service providers?

A. No. Even customers who leave the IOUs to take service from direct access, community choice aggregators, or municipal providers continue to pay CDWR Bond Charges, and it has also generated complaints. For example, in 2008 the Consumer Affairs Branch received a complaint from a customer who lived in PG&E's service territory but moved to a housing development serviced by the Modesto Irrigation District (MID), a municipal provider. Exh. No. CAL-267.[50] The customer complained about the Bond Charges, opining that "PG&E customers at the time of the Crisis paid extremely high energy bills during this time. Revenue collected by PG&E on excessive bills at that time should have been used to offset the [CDWR] Bond charges." *Id.* at 1. PG&E responded and explained that

[49] The customer's name, address, phone number, and account number have been redacted from the exhibit.

[50] The customer's name, address, phone number, and account number have been redacted from the exhibit.

New Municipal Departing Load customers retained the obligation to pay the Bond Charges. *Id.* at 3.

Q. Do you believe costs of the CDWR Long-Term Contracts were unreasonably high and imposed an excessive burden on California consumers?

A. Yes, and not just because of the enormous total costs of the contracts. I have also reviewed the analysis of Dr. Metin Celebi, in which he compared the actual payments under all CDWR Long-Term Contracts to the payments that CDWR could have made for comparable energy products based on forward market prices from September 2001 after the market dysfunction had ended. Dr. Celebi's analysis demonstrates that consumers paid an astounding $15.93 billion (in nominal dollars) of additional costs for power delivered under the Long-Term Contracts compared to what they could have paid for the same deliveries at post-Crisis prices.[51] With FERC quarterly interest charges added through May 2015, the burden of these additional costs increases to $24.49 billion.[52]

[51] Prepared Direct Testimony of Metin Celebi on Behalf of the California Parties, Exh. No. CAL-634 at 79.
[52] *Id.*

Q. Please describe how the costs of the Shell and Iberdrola Contracts have burdened ratepayers.

A. I understand that CDWR's actual cost under the Shell Contract for its entire term was $2.85 billion (nominal) for 34 million MWh of energy, and that CDWR's actual cost under the Iberdrola Contract for its entire term was $1.10 billion (nominal) for 11.53 million MWh of energy.[53]

Q. Do you believe that these costs of the Shell and Iberdrola Contracts, taken alone, were unreasonably high and imposed an excessive burden on California consumers?

A. Yes, I do. I know from my own experience, and review of the basic terms of the Shell and Iberdrola Contracts, that their price terms were very high as compared to competitive prices both before and after the Crisis. Further, I have also reviewed the analysis of Dr. Metin Celebi, in which he quantifies payments under the Shell and Iberdrola Contracts compared to the forward market prices that would have been available to CDWR for comparable energy products once the market dysfunction had ended. Dr. Celebi's analysis demonstrates staggering overpayments of $1.37 billion to Shell and $601 million to Iberdrola (in nominal dollars).[54] When FERC quarterly interest is applied through May 2015, the excessive burden of these contracts increases to $2.14 billion for the Shell Contract and $875 million

[53] *Id*. at 10 (Shell), 14 (Iberdrola).
[54] *Id*. at 39.

for the Iberdrola Contract.[55] But this still does not provide a measure of the total burden on consumers because Dr. Celebi's "down the line" analysis calculates excessive costs for power delivered from October 1, 2001 onward, and thus does not capture the additional excessive payments earlier in 2001 under both contracts.

In his analysis Dr. Celebi also illustrates the excessive rates consumers paid for power delivered each year under the Shell and Iberdrola Contracts, as well as the entire portfolio of CDWR Long-Term Contracts (including Shell and Iberdrola). Dr. Celebi shows the actual contract rate for the power delivered under these contracts compared to the rates for the same deliveries at post-Crisis prices, which he presents in $/MWh at Tables 2, 3, and 10 of his testimony ("actual contract rate" column versus "post-Crisis forward market rate").[56] Table 4 below expresses Dr. Celebi's results (the actual rates and post-crisis rates) in cents per kWh for the CDWR Long-Term contracts, and also presents the difference between them, which is the excess rates CDWR consumers paid for the total portfolio of Long-Term Contracts. Table 5 presents this same information on the actual, post-crisis, and excess rates but just for the Shell and Iberdrola Contracts.

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55 *Id*. at 41.

56 *Id*. at 37 (Shell), 38 (Iberdrola) 81 (all CDWR Long-Term Contracts).

Table 4: Excess Consumer Rates -- Difference Between Actual CDWR Contract Prices vs. Post-Crisis Forward Market Prices

	All CDWR Long-Term Contracts		
Year	actual rate (¢/kWh)	post-crisis rate (¢/kWh)	**excess rate (¢/kWh)**
2001 (Oct-Dec)	11.52	3.62	**7.90**
2002	8.97	3.94	**5.03**
2003	8.62	4.17	**4.45**
2004	7.90	4.08	**3.82**
2005	8.21	4.12	**4.09**
2006	7.57	4.20	**3.37**
2007	7.53	4.29	**3.25**
2008	7.80	4.36	**3.43**
2009	5.66	4.55	**1.11**
2010	6.24	4.60	**1.64**
2011	6.32	4.74	**1.58**
2012	5.06	4.28	**0.78**

Table 5: Excess Consumer Rates -- Difference Between Actual CDWR Contract Prices vs. Post-Crisis Forward Market Prices

	Shell Contract			Iberdrola Contract		
Year	actual rate (¢/kWh)	post-crisis rate (¢/kWh)	**excess rate (¢/kWh)**	actual rate (¢/kWh)	post-crisis rate (¢/kWh)	**excess rate (¢/kWh)**
2001 (Oct-Dec)	18.46	3.06	**15.40**	7.00	2.98	**4.02**
2002	16.15	3.85	**12.30**	7.00	3.12	**3.88**
2003	17.73	3.96	**13.76**	7.73	3.89	**3.85**
2004	7.89	3.93	**3.96**	9.64	3.84	**5.81**
2005	7.84	3.93	**3.91**	11.79	3.86	**7.92**
2006	7.06	3.95	**3.11**	11.35	4.00	**7.36**
2007	7.07	4.08	**2.99**	9.77	4.01	**5.75**
2008	8.37	4.17	**4.20**	11.25	4.10	**7.15**
2009	5.10	4.26	**0.84**	8.42	4.32	**4.09**
2010	5.78	4.27	**1.51**	8.69	4.25	**4.44**
2011	5.53	4.43	**1.10**	57.05	3.97	**53.08**
2012	4.52	4.10	**0.43**			

Table 5 shows that the rates consumes paid for power delivered under the Shell Contract in 2001-2003 were four to six times higher than what competitive rates would have been once the market dysfunction ended. The rates consumers paid for power delivered under the Iberdrola Contract were two to three times higher in almost every year compared to what the competitive rate would have been once the market dysfunction ended (the multiple is 1.9 for 2009).

Q. Did ratepayers pay for the overcharges that Dr. Celebi determined Shell and Ibderdrola collected in excess of competitive rates?

A. Yes. Every penny CDWR has paid related to the Long-Term Contracts has already been collected through the Power and Bond Charges over the years and the rate increases in 2001, or will be fully paid by the individual ratepayers of California when the Bond Charge ends in 2022. That includes the overcharges paid to all sellers and specifically the overcharges paid to Shell and Iberdrola that Dr. Celebi determined exceeded what the rates would have been for competitively priced contracts for the same products.

Q. What additional burden was caused to California by the CDWR Long-Term Contract overcharges?

A. There were significant burdens imposed on the California economy beyond the specific dollar amounts paid by individual ratepayers. I have reviewed

Dr. Peter Berck's testimony[57] in which he models the impact on California personal income, employment and the economy as a result of the pass-through to ratepayers of the overcharges associated with the CDWR Long-Term Contracts. Based on my 30 years of work with California electricity rates, and how they impact the California economy, I agree with Dr. Berck that the CDWR Long-Term Contract overcharges caused an extraordinary burden on the entire California economy.

Q. What are your conclusions about the impact of the Shell and Iberdrola overcharges on California consumers?

A. The bottom line is the CDWR Long-Term Contracts, including the Shell and Iberdrola Contracts, have placed a massive economic burden on California consumers that is still being paid down today. But for those contracts and the market dysfunction that made them necessary, ratepayers in California would have avoided many hardships exemplified by the letters from real people included in my testimony. The Commission should grant a remedy in this proceeding to finally relieve California consumers from the undue and excessive burden they have been saddled with for the last fourteen years as a result of the challenged contracts, and order Shell and Iberdrola to repay these overcharges back to California ratepayers.

[57] Prepared Direct Testimony of Dr. Peter Berck on Behalf of the California Parties, Exh. No. CAL-666.

Q. Does this conclude your testimony?

A. Yes.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on May 14, 2015 in San Francisco, California.

MP Florio

Commissioner Michel Peter Florio