

write a healthy check, and we did so in 2002—\$22 billion for secondary and elementary education. It's a 25 percent increase. We've increased money by 35 percent for teacher recruitment, teacher retention, and teacher pay.

I wish that had been their proposal, but it was not. It was not. Their proposal was for a 3.5 percent increase, basically enough only to cover inflation despite the tremendous needs beyond inflation that our schools have. All of the difference between the 3.5 percent and what the President identified here was the result of Democratic leadership in the Senate and the Appropriations Committee to get that increase.

Let's be fair. Let's be honest. Let's be candid in terms of it. That is the basic and bottom line. And all we have to do is say: Well, if this really was their proposal last year, what happened to it this year? This year, the administration proposes a 2.8 percent increase, again inflation only. Why on the one hand would you go out and tell people in Michigan that you provided \$22 billion for elementary and secondary education, a 25 percent increase, and a 35 percent increase for teachers, recruitment for teachers for one year, and now come on back and propose a 2.8 percent increase.

Who is fooling whom? It was 3.5 percent last year, and the Democrats raised it to the figures the President talked about, and this year it is 2.8 percent. That is what is in the budget. That is what is in the budget numbers.

It gets worse. Look at what the administration's budget is for the future, according to the last budget conference report. It provides virtually zero new money for education for the next 8 years, all the way to 2011. They put forward funding to cover the cost of inflation, but not a nickel above it. There it is, as shown on the chart, for the next 8 years. For the next 8 years: a zero increase. We do not hear them talking about that. We do not hear the President or the Department of Education or anyone for the President denying this. It is because that happens to be it.

What we are saying is that we believe—believe deeply—that when you have an over \$2 trillion budget and you say education is your most important priority, outside of national security and the war on terrorism, we think you can do better on education than this. That is what the Democrats say. And that is what we want the American people want. An over \$2 trillion budget, and they can't do anything better than a 2.8 percent increase. It doesn't even meet the challenges of inflation and growing school enrollment, never mind all our unmet school needs.

So the schoolteachers who are out there now trying to upgrade their skills, as we have effectively required in last year's reform legislation, so that we can have a well-qualified teacher in every classroom, they are going to be denied the support. 18,000 fewer teachers who received training

last year budget will go untrained next year under the administration's budget.

Those children, whom we are asking to meet higher standards, who need that extra help and assistance in the after-school programs with tutorials, they are going to find the doors are going to be closed to them in the after-school programs. 33,000 children who received after-school learning opportunities will be pushed out of programs next school year under the administration's budget.

Why is it that at a time when the country has come together, and there has been a great hullabaloo about the signing of the No Child Left Behind Act—and I participated in it, and welcomed the opportunity, as others did in this body, to see that we were going to give national focus and attention on the issues of education—we are pulling the rug out from underneath this effort? Are we expecting that schools reform will be a success on a tin cup budget? It simply cannot be done. Every schoolteacher, every parent understands that. Every school board member, every principal, every superintendent understands it.

If we are going to leave no child behind, we cannot accept the Administration's budget that provides services to just over a third of all the needy children eligible for Title I assistance. They leave almost 6 million children behind. The Administration wanted to title our bipartisan school reform bill the No Child Left Behind Act. The legislation laid out a glide path of funding so that we would provide supplemental services for every needy child. That is what that legislation stated. That is what the President signed. But you don't get there with this budget.

What we are basically talking about here is whether we are going to get the qualified teachers in underserved areas, areas with the highest incidence of dropout rates among Hispanic Americans and the highest number of unqualified teachers. That does not mean those teachers who are working today under extremely challenging and difficult conditions don't want to be a part of this whole effort to upgrade skills. They want to be. Give them a chance. Give them a fighting chance.

That is what last year's bill sought to do. It sought to give them a chance for certification. Give them a chance for training. Give them a chance for upgrading their skills. We have seen where it has been done. It has been done down in North Carolina. It is being done in a handful of other States. We believe the Nation ought to be about it. That is the policy that last year's bipartisan legislation committed us. That is what we are not living up to.

I hope we can try to get back to what we committed ourselves to and what we are fighting for here today. We have the opportunity at this time to try to breathe new life into the pledge to leave no child behind. We still have the

appropriations process to go through. We welcome a President who says: All right. We have looked through these figures. We know we are fighting a war on terrorism. We know we are funding homeland security. But by God, at the greatest times of American history, we have not only fought overseas but we have invested here at home. The place to start off that investment is going to be here in the area of education. We are going to support those past efforts, those bipartisan efforts and make sure that the legislation comes to life with an infusion of added and desperately needed resources.

We are going to continue to make our presentation, continue to make this case day in and day out. We want to tell the parents in this country that when we were a part of voting for that legislation to enhance academic achievement and accomplishment, we said it was a national priority and we meant it.

This administration's budget does not make education a national priority. So, we are going to fight for those families. We are going to fight here on the floor. We are going to fight during the appropriations process. We will take on the administration. But we are not going to leave the children of this country behind.

ENRON MARKET MANIPULATION

Mrs. FEINSTEIN. Madam President, this morning I sent a letter to the Attorney General asking him to institute a criminal investigation against Enron and other energy companies. I will read that letter into the RECORD.

The letter says:

DEAR ATTORNEY GENERAL ASHCROFT: I am writing to ask that you institute a criminal investigation to determine whether federal fraud statutes or any other laws were violated by Enron and other energy companies engaged in energy trading and delivery of natural gas and electricity to the Western Energy Market in 2000 and 2001.

In January, during a hearing before the Energy Commission I asked Patrick Wood, Chairman of the Federal Energy Regulatory Commission (FERC), to investigate whether Enron manipulated prices in the Western Energy Market. The enclosed documents released by FERC indicate that Enron was not only manipulating prices in the West, but also engaged in a number of calculated strategies such as "Death Star," "Fat Boy," and "Get Shorty" to either receive payment for energy not delivered or increase price. In my book, this is outright fraud.

Since Arthur Andersen (the entire company) has been indicted by the Justice Department for shredding documents, it seems to me that Enron is at least as culpable, if not more so, for creating certain schemes to perpetuate acts of fraud on consumers under the guise of corporate strategies.

Because UBS Warburg has purchased Enron's trading entity, I am particularly concerned that the same manipulative trading strategies may continue to be in place today. I ask that you launch a thorough investigation into this matter which may well involve other energy companies that delivered energy into the Western Energy Market in 2000 and 2001 and continue to do so today.

Thank you for your immediate attention to this matter.

In the last 2 years I have listened to my colleagues, to FERC, and to energy companies tell me that the California energy crisis was caused by inherent problems in California.

I have never disagreed that California's flawed energy deregulation laws helped precipitate an energy crisis. But I have also always believed that energy companies took advantage of California and the rest of the West to manipulate the market and to drive up prices. There is simply no other way that energy costing \$30 a megawatt hour at one time, a few days later could cost \$350 a megawatt hour.

On March 7, one of my colleagues in this esteemed House said the following on the Senate floor to justify opposition to our futures derivatives amendment:

I have seen no evidence—in fact I will point out that Chairman Greenspan has seen no evidence—that derivatives by Enron, or by anybody else, had anything to do with the energy spikes in prices in California.

So I would ask my esteemed colleague to read these documents which are today on the Federal Energy Regulatory Commission's Web site and tell us if he can still say that.

These documents, released yesterday, are nothing short of astonishing. They discuss strategies with popular names such as Death Star and Get Shorty to describe in detail how energy prices can be manipulated. And then there is a document, by a law firm, Brobeck, which attempts to justify the strategies.

I am not shocked to learn that this had occurred. I have been saying this for a long time now. But the arrogance of documenting such illicit and underhanded behavior, and using popular titles for it, I think speaks for itself.

Make no mistake about it, this is a smoking gun.

I ask unanimous consent these memoranda be printed in the RECORD.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

BROBECK, ATTORNEYS AT LAW.

As part of our preparation for the various investigations and litigation actually and potentially facing EPMI in connection with the California energy market, Jean Frizzell, Barrett Reasoner, Mike Kirby and Gary Fergus spent several full days over the past few months at EPMI for the purpose of learning and understanding more about the data, methodology, the various strategies used by the traders and the implementation of those strategies. This is a highly complicated subject matter and all of us are still learning.

We used as our starting point the Preliminary Memorandum dated December 8, 2000, which we understand was prepared as the first step in educating you and outside counsel about EMPI trading practices. The Preliminary Memorandum was written by Steve Hall, an associate on loan from the Stool Rives law firm, and co-authored by Christian Yoder, the in-

house counsel at EMPI. Over the course of the past month, we have spent a fair amount of time with a number of traders. In some instances, we met the same traders more than once to try and understand the various practices. On January 11th, we spent another full day with Tim Belden, chief trader for EMPI in Portland going over the strategies that have been identified. Here is our summary of the status of our further investigation and present analysis of the EMPI trading practices:

OVERVIEW

The California energy market during calendar year 2000 was an incredibly complex and dynamic environment. Weather, supply shortages, physical limits and market volatility contributed to this environment. During the past month, we have had several outside law firm lawyers, each with varying degrees of experience with California electricity market, work together with the EPMI traders to understand the market and the practices. From time to time, the understanding of and interpretation by the lawyers interviewing the same traders about the market and the trading practices were inconsistent. When that happened, we would go back to the traders to try and gain a common understanding of the particular market and trading strategy. At this point in the process, we realize that there are very few clearly defined trading strategies. Depending upon the particular circumstances of the day, trading strategies were modified and applied in response to EPMI's portfolio, market conditions, the individual trader's understanding of them, and the individual trader's preference within a large overall framework. In part, this is because trading is done 7 days a week for many different schedules (e.g. PX day ahead, PX day of, ISO hour ahead, ISO real time etc).

EPMI is only one of the many market participants. We do not have nearly enough information to gain a good understanding of all of the impacts other participants, and whatever their strategies might have been, had on the market. For these reasons, you should consider this a work in progress, rather than the definitive analysis of EPMI trading practices. We may learn that some of the conclusions we have reached will later turn out to be inaccurate. In fact, we learned during this process that some of other information contained in the Preliminary Memorandum, which resulted in some erroneous assumptions and conclusions, cannot be supported by the facts and evidence which are now known. In other instances, some statements in the Preliminary Memorandum understandably mixed trading strategies and schedules. In order to minimize the risk of confusing matters further, we have taken the additional step of having Tim Belden review this memorandum to see if we have accurately described the trading practices and to see whether he can spot any flaws in our analysis. We tried to follow the same format of the Preliminary Memorandum for easy cross reference.

"INCING" LOAD INTO THE REAL TIME MARKET

"Incing" was a slang name (short for "increasing") for a trading strategy used in response to the independently owned utilities (IOU) well known and documented strategy of significantly underestimating their load in the PX day ahead market. This practice by the utilities apparently occurred almost daily. Because the IOU's purchased their power through the PX day ahead market, the PX thus became their scheduling coordinator; the ISO's resulting schedules under-

stated the load for the next day. The IOU practice of underestimating load artificially lowered the PX day ahead market clearing price. Incing served to partially counteract the reliability issues caused by this practice and, from the California consumer's perspective, appears to have been preferable to the alternative of selling outside of California. In addition, incing may have increased the actual guaranteed available supply of power in the California market depending upon the shape of the demand curve. Incing reduced demand in the ISO market, therefore reduced the ex post price and potentially lowered the overall cost to California consumers. When incing, EPMI was a price taker in the ISO ex post market.

DEATH STAR

Death Star was a slang name for a strategy that addressed congestion between northern and southern California. During certain periods, there are transmission limits between northern California and southern California on path 15 and path 26. It appears that the source of the congestion may have been the consistent underestimating of load by PG&E—the same underestimating referred to above. Because the demand was artificially lower in Northern California, it appears supply was trying to move to southern California. By using a combination of ISO approved scheduled counterflows and alternative non-ISO transmission lines, EPMI increased the transfer capability between the regions, reduced congestion, and utilized underused pathways to increase the overall supply of electricity in southern California. By virtue of using multiple transmission paths, EPMI took on financial risks, including having the transmission line derated, assessment of additional congestion charges, and liability for take or pay transmission charges on alternative transmission lines to execute the strategy.

Contrary to certain statements in the Preliminary Memorandum, congestion was relieved and energy did flow through otherwise underutilized paths.

LAND SHIFT

Load shift is a general term used to describe a variety of scheduling practices and trading strategies in the day ahead and hour ahead markets. One variation of load shifting involved scheduling ISO approved counterflows in the ISO day ahead market, ISO hour ahead market or both. Generally speaking, as an alternative to purchasing power in the north, EPMI purchased power in the south and counterflowed that power to the north. Such transactions had the effect of providing congestion relief in the ISO day ahead market or the ISO hour ahead markets. These transactions placed EPMI at financial risk for the differences in price between the regions.

Another category of load shifting involves shifting the load on paths for which EPMI purchased firm transmission rights. This category was briefly discussed in the Preliminary Memorandum. We have learned more about his load shifting strategy since the Preliminary Memoranda was written. As the result of several in depth interviews with the traders and review of the public market surveillance reports available in the public and all market participants, it is apparent that the assumptions and conclusions contained in the Preliminary Memorandum were inaccurate. First, in hindsight, it now appears likely that the load shifting strategy, without knowing the impact of other market factors, sometimes may have reduced the prices in the north while leaving prices in the south unchanged or minimally impacted. Second, it appears that the estimate of profits from this load shifting strategy in the Preliminary Memorandum was

vastly overstated and indeed confused. It would appear that the source of the confusion may have been that the Preliminary Memorandum reported the total profit attributable of the EPMI firm transmission rights on path 26, as reflected in ISO public documents, as opposed to any calculation of the profit of this particular strategy.

GET SHORTY

"Get Shorty" was the slang name for a trading strategy involving the provision of ancillary services in the PX day ahead and ISO hour ahead markets. EPMI committed to providing the ancillary services in the PX day ahead market and covered its position by purchasing those services in the ISO hour ahead market. Accordingly, EPMI actually purchased the services necessary to provide ancillary services if called upon to do so. In fact, the ISO regularly called upon EPMI for ancillary services that were provided. Based upon the information we have so far, there was only one incident where EPMI failed to cover its position. In that single instance, EPMI promptly offered to, and ultimately did, return the payment received for the ancillary services that were not provided. Accordingly, the strategy did not impact the reliability of the grid. This strategy, however, did place EPMI at financial risk. On a number of occasions, it appears the cost to cover exceeded the amount received in the day ahead market and EPMI provided services to the ISO at a loss.

The Preliminary Memorandum incorrectly assumed that the information provided to the ISO was inaccurate. It now appears that, consistent with daily ISO practices, that EPMI did not specify the source of the ancillary services at the time of sale.

RICOCHET

"Ricochet" was the slang term for a trading strategy that existed because EPMI was not permitted to make adjustment bids in SC to SC (scheduling coordinator) trades due to limitations in the ISO software systems. Ricochet served the dual purpose of allowing for adjustment bids and opening up market options for EPMI including the supplemental and bilateral markets. By using this strategy, EPMI was at financial risk if the PX price exceeded either the supplemental or bilateral market price. Furthermore, the ISO software limitation forced EPMI to incur additional costs, export charges, ancillary services on exports and line losses on imports.

Ricochet appears not to have been a strategy that was used to a significant extent when compared to EPMI's overall portfolio. It appears that other market participants with control areas adjacent to California and access to extremely flexible generation resources may have relied more extensively on this strategy.

At the present time, EPMI faces its own software limitations in implementing ISO approved adjustment bids in SC to SC transactions.

NON-FIRM EXPORT

This was a trading practice that involved scheduling counterflows three hours ahead of the time energy would flow. The schedule counterflow had the likely effect of reducing the congestion charge on the scheduled path. Under this strategy, EPMI qualified for the congestion relief payment two hours before the scheduled flow. Ultimately, EPMI did not flow the power. Based upon the information we have, this practice does not appear to have had any demonstrable impact on either the PX price or the ISO ex post price. However, in August 2000, the ISO directed that the practice be discontinued. The EPMI traders with whom we spoke confirmed that EPMI has complied with that mandate.

SELLING NON FIRM ENERGY AS FIRM ENERGY

This was a trading strategy that was occasionally used in southern California to allow

for the import of power that would otherwise not be available. The net effect of this practice, in conjunction with other market factors, was to increase the overall supply with no apparent impact on PX price. EPMI was subjected to financial risk in that if the non-firm power was cut, EPMI would have to cover the energy cut by purchasing that power in the ISO market at the ex post price.

At this time, it appears that the net result of this practice was to bring additional supply into California.

SCHEDULING ENERGY TO COLLECT THE CONGESTION CHARGE II

The net effect of this strategy was to schedule counterflow thereby reducing congestion in hour ahead market. This was a high risk strategy because EPMI was exposed to the ex post market price that could exceed the congestion price. This strategy could have potentially lowered the congestion charge depending upon a wide variety of other market factors.

STOEL RIVES LLP,
December 8, 2000.

To: Richard Sanders
From: Christian Yoder and Stephen Hall
Re: Traders' Strategies in the California Wholesale Power Markets/ ISO Sanctions

CONFIDENTIAL: ATTORNEY/CLIENT PRIVILEGE/
ATTORNEY WORK PRODUCT

This memorandum analyzes certain trading strategies that Enron's traders are using in the California wholesale energy markets. Section A explains two popular strategies used by the traders, "inc-ing" load and relieving congestion. Section B describes and analyzes other strategies used by Enron's trades, some of which are variations on "inc-ing" load or relieving congestion. Section C discusses the sanction provisions of the California Independent System Operator ("ISO") tariff.

A. THE BIG PICTURE

1. "Inc-ing" load into the real time market

One of the most fundamental strategies used by the traders is referred to as "inc-ing" load into the real time market." According to one trader, this is the "oldest trick in the book" and, according to several of the traders, it is now being used by other market participants.

To understand this strategy, it is important to understand a little about the ISO's real-time market. One responsibility of the ISO is to balance generation (supply) and loads (demand) on the California transmission system. During its real-time energy balancing functions the ISO pays/charges market participants for increasing/decreasing their generation. The ISO pays/charges market participants under the schemes: "instructed deviations" and uninstructed deviations." Instructed deviations occur when the ISO selects supplemental energy bids from generators offering to supply energy to the market in real time in response to ISO instructions. Market participants that increase their generation in response to instructions ("instructed deviation") from the ISO are paid the "inc" price. Market participants that increase their generation without an instruction from the ISO (an "uninstructed deviation") and paid the ex post "dec" price. In real-time, the ISO issues instructions and publishes ex post prices at ten-minute intervals.

"Inc-ing load" into the real market" is a strategy that enables Enron to send excess generation to the imbalance energy market as an uninstructed deviation. To participate in the imbalance energy market it is necessary to have at least 1 MW of load. The reason for this is that a generation cannot schedule energy onto the grid without hav-

ing a corresponding load. The ISO requires scheduling coordinators to submit balanced schedules, i.e., generation must equal load. So, if load must equal generation, how can Enron end up with excess generation in the real-time market?

The answer is to artificially increase ("inc") the load on the schedule submitted to the ISO. Then, in real-time, Enron sends the generation it scheduled, but does not take as much load as scheduled. The ISO's meters record that Enron did not draw as much load, leaving it with an excess amount of generation. The ISO gives Enron credit for the excess generation and pays Enron the dec price multiplied by the number of excess megawatts. An example will demonstrate this. Enron will submit day-ahead schedule showing 1000 MW of generation scheduled for delivery to Enron Energy Services ("EES"). The ISO receives the schedule, which says "1000 MW of generation" and "1000 MW of load. The ISO sees that the schedule balances and, assuming there is no congestion, schedules transmission for this transaction. In real-time, Enron sends 1000 MW of generation, but Enron Energy Services only draws 500 MW. The ISO's meters show that Enron made a net contribution to the grid of 500 MW, and so the ISO pays Enron 500 times the dec price.

The traders are able to anticipate when the dec price will be favorable by comparing the ISO's forecasts with their own. When the traders believe that the ISO's forecast underestimates the expected load, they will inc load the real time market because they know that the market will be short, causing a favorable movement in real-time ex post prices. Of course, the much-criticized strategy of California's investor-owned utilities ("IOUs") of underscheduling load in the day-ahead market has contributed to the real-time market being short. The traders have learned to build such underscheduling into their models, as well.

Two other points bear mentioning. Although Enron may have been the first to use this strategy, other have picked up on it, too. I am told this can be shown by looking at the ISO's real-time metering, which shows that an excess amount of generation, over and above Enron's contribution, is making to the imbalance market as an uninstructed deviation. Second, Enron has performed this service for certain other customers for which it acts as scheduling coordinator. The customers using this service are companies such as Powerex and Puget Sound Energy ("PSE"), that have generation to sell, but not native California load. Because Enron has native California load through EES, it is able to submit a schedule incorporating the generation of a generator like Powerex or PSE and balance the schedule with "dummied-up" load from EES.

Interestingly, this strategy appears to benefit the reliability of the ISO's grid. It is well known the California ISOs have systematically underscheduled their load in the PX's Day-Ahead market. By underscheduling their load into the Day-Ahead market, the IOUs have caused the ISO to have a call on energy in real time in order to keep the transmission system in balance. In other words, the transmission grid is short energy. By deliberately overscheduling load, Enron has been offsetting the ISO's real time energy deficit by supplying extra energy that the ISO needs. Also, it should be noted that in the ex post market Enron is a "price taker," meaning that they are not submitting bids or offers, but are just being paid the value of the energy that the ISO needs. If the ISO did not need the energy, the dec price would quickly drop to \$0. So, the fact that Enron was getting paid for this energy shows that the ISO needed the energy to balance the

transmission system and offset the IOU's underscheduling (if those parties own Firm Transmission Rights ("FTR") over the path).

2. *Relieving Congestion*

The second strategy used by Enron's traders is to relieve system-wide congestion in the real-time market, which congestion was created by Enron's traders in the PX's Day Ahead Market. In order to relieve transmission congestion (i.e., the energy scheduled for delivery exceeds the capacity of the transmission path), the ISO makes payments to parties that either schedule transmission in the opposite direction ("counterflow payments") or that simply reduce their generation/load schedule.

Many of the strategies used by the traders involve structuring trades so that Enron gets paid the congestion charge. Because the congestion charges have been as high as \$750/MW, it can often be profitable to sell power at a loss simply to be able to collect the congestion payment.

B. REPRESENTATIVE TRADING STRATEGIES

The strategies listed below are examples of actual strategies used by the traders, many of which utilize the two basic principles described above. In some cases, the strategies are identified by the nicknames that the traders have assigned to them. In some cases, i.e., "Fat Boy," Enron's traders have used these nicknames with traders from other companies to identify these strategies.

1. *Export of California Power*

a. As a result of the price caps in the PX and ISO (currently \$250), Enron has been able to take advantage of arbitrage opportunities by buying energy at the PX for export outside California. For example, yesterday (December 5, 2000), prices at Mid-C peaked at \$1200, while California was capped at \$250. Thus, traders could buy power at \$250 and sell it for \$1200.

b. This strategy appears not to present any problems, other than a public relations risk arising from the fact that such exports may have contributed to California's declaration of a Stage 2 Emergency yesterday.

2. *"Non-firm Export"*

a. The goal is to get paid for sending energy in the opposite direction as the constrained path (counterflow congestion payment). Under the ISO's tariff, scheduling coordinators that schedule energy in the opposite direction of the congestion on a constrained path get paid the congestion charges, which are charged to scheduling coordinators scheduling energy in the direction of the constraint. At times, the value of the congestion payments can be greater than the value of the energy itself.

b. This strategy is accomplished by scheduling non-firm energy for delivery from SP-15 or NP-15 to a control area outside California. This energy must be scheduled three hours before delivery. After two hours, Enron gets paid the counterflow charges. A trader then cuts the non-firm power. Once the non-firm power is cut, the congestion resumes.

c. The ISO posted notice in early August prohibiting this practice. Enron's traders stopped this practice immediately following the ISO's posting.

d. The ISO objected to the fact that the generators were cutting the non-firm energy. The ISO would not object to this transaction if the energy was eventually exported.

Apparently, the ISO has heavily documented Enron's use of this strategy. Therefore, this strategy is the more likely than most to receive attention from the ISO.

2. *"Death Star"*

a. This strategy earns money by scheduling transmission in the opposite direction

of congestion; i.e., schedule transmission north in the summertime and south in the winter, and then collecting the congestion payments. No energy, however, is actually put onto the grid or taken off.

b. For example, Enron would first import non-firm energy at Lake Mead for export to the California-Oregon border ("COB"). Because the energy is traveling in the opposite direction of a constrained line, Enron gets paid for the counterflow. Enron also avoids paying ancillary service charges for this export because the energy is non-firm, and the ISO tariff does not require the purchase of ancillary services for non-firm energy.

c. Second, Enron buys transmission from COB to Lake Mead at tariff rates to serve the import. The transmission line from COB to Lake Mead is outside of the ISO's control area, so the ISO is unaware that the same energy being exported from Lake Mead is simultaneously being imported into Lake Mead. Similarly, because the COB to Lake Mead line is outside the ISO's control area, Enron is not subject to payment of congestion charges because transmission charges for the COB to Lake Mead line are assessed based on imbedded costs.

d. The ISO probably cannot readily detect this practice because the ISO only sees what is happening inside its control area, so it only sees half of the picture.

e. The net effect of these transactions is that Enron gets paid for moving energy to relieve congestion without actually moving any energy or relieving any congestion.

3. *"Load Shift"*

a. This strategy is applied to the Day-Ahead and the real-time markets.

b. Enron shifts load from a congested zone to a less congested zone, thereby earning payments for reducing congestion, i.e., not using our FTRs on a constrained path.

c. This strategy requires that Enron have FTRs connecting the two zones.

d. A trader will overschedule load in one zone, i.e., SP-15, and underschedule load in another zone, i.e., NP-15.

Such scheduling will often raise the congestion price in the zone where load was overscheduled.

The trader will then "shift" the overscheduled "load" to the other zone, and get paid for the unused FTRs. The ISO pays the congestion charge (if there is one) to market participants that do not use their FTRs. The effect of this action is to create the appearance of congestion through the deliberate overstatement of loads, which causes the ISO to charge congestion charges to supply scheduled for delivery in the congested zone. Then, by reverting back to its true load in the respective zones, Enron is deemed to have relieved congestion, and gets paid by the ISO for so doing.

e. One concern here is that by knowingly increasing the congestion costs, Enron is effectively increasing the costs to all market participants in the real time market.

f. Following this strategy has produced profits of approximately \$30 million for FY 2000.

4. *"Get Shorty"*

a. Under this strategy, Enron sells ancillary services in the Day-ahead market.

b. Then the next day, in the real-time market, a trader "zeroes out" the ancillary services, i.e., cancels the commitment and buys ancillary services in the real-time market to cover its position.

c. The profit is made by shorting the ancillary services, i.e., sell high and buy back at a lower price.

d. One concern here is that the traders are applying this strategy without having the ancillary services on standby. The traders are careful, however, to be sure to buy serv-

ices right at 9:00 a.m. so that Enron is not actually called upon to provide ancillary services. However, once, by accident, a trader inadvertently failed to cover, and the ISO called on those ancillary services.

e. This strategy might be characterized as "paper trading," because the seller does not actually have the ancillary services to sell. FERC recently denied Morgan Stanley's request to paper trade on the New York ISO.

The ISO tariff does provide for situations where a scheduling coordinator sells ancillary services in the day ahead market, and then reduce them in the day-of-market. Under these circumstances, the tariff simply requires that the scheduling coordinator replace the capacity in the hour-ahead market. ISO Tariff, SBP 5.3, Buy Back of Ancillary Services.

f. The ISO tariff requires that schedules and bids for ancillary services identify the specific generating unit or system unit, or in the case of external imports, the selling entity. As a consequence, in order to short the ancillary services it is necessary to submit false information that purports to identify the source of the ancillary services.

5. *"Wheel Out"*

a. This strategy is used when the interties are set to zero, i.e., completely constrained.

b. First, knowing that the intertie is completely constrained, Enron schedules a transmission flow through the system. By so doing, Enron earns the congestion charge. Second, because the line's capacity is set to "0," the traders know that any power scheduled to go through the intertie will, in fact be cut. Therefore, Enron earns the congestion counterflow payment without having to actually send energy through the intertie.

c. As a rule, the traders have learned that money can be made through congestion charges when a transmission line is out of service because the ISO will never schedule an energy delivery because the intertie is constrained.

6. *"Fat Boy"*

a. This strategy is described above in section A(1).

7. *"Ricochet"*

a. Enron buys energy from the PX in the Day Of market, and schedules it for export. The energy is sent out of California to another party, which charges a small fee per MW, and then Enron buys it back to sell the energy to the ISO real-time market.

b. The effect of this strategy on market prices and supply is complex. First, it is clear that Enron's intent under this strategy is solely to arbitrage the spread between the PX and the ISO, and not to serve load or meet contractual obligations. Second, Ricochet may increase the Market Clearing Price by increasing the demand for energy. (Increasing the MCP does not directly benefit Enron because it is buying energy from the PX, but it certainly affects other buyers, who must pay the same, higher price.) Third, Ricochet appears to have a neutral effect on supply, because it is returning the exported energy as an import. Fourth, the parties that pay Enron for supplying energy to the real time ex post market are the parties that underscheduled, or underestimated their load, i.e., the IOUs.

8. *Selling Non-firm Energy as Firm Energy*

a. The traders commonly sell non-firm energy to the PX as "firm." "Firm energy," in this context, means that the energy includes ancillary services. The result is that the ISO pays EPMI for ancillary services that Enron claims it is providing, but does not in fact provide.

b. The traders claim that "everybody does this," especially for imports from the Pacific Northwest into California.

c. At least one complaint was filed with the ISO regarding Enron's practice of doing this. Apparently, Arizona Public Service sold non-energy to Enron, which turned around and sold the energy to the ISO as firm. APS cut the energy flow, and then called the ISO and told the ISO what Enron had done.

9. Scheduling Energy To Collect the Congestion Charge II

a. In order to collect the congestion charges, the traders may schedule a counterflow even if they do not have any excess generation. In real time, the ISO will see that Enron did deliver the energy it promised, so it will charge Enron the inc price for each MW Enron was short. The ISO, however, still pays Enron the congestion charge. Obviously a loophole, which the ISO could close by simply failing to pay congestion charges to entities that failed to deliver the energy.

b. This strategy is profitable whenever the congestion charge is sufficiently greater than the price cap. In other words, since the ex post is capped at \$250, whenever the congestion charge is greater than \$250 it is profitable to schedule counterflows, collect the congestion charge, pay the ex post, and keep the difference.

C. ISO TARIFF

The ISO tariff prohibits "gaming," which it defines as follows:

"Gaming," or taking unfair advantage of the rules and procedures set forth in the PX or ISO Tariffs, Protocols or Activity Rules, or of transmission constraints in period in which exist substantial Congestion, to the detriment of the efficiency of, and of consumers in, the ISO Markets. "Gaming" may also include taking undue advantage of other conditions that may affect the availability of transmission and generation capacity, such as loop flow, facility outages, level of hydropower output or seasonal limits on energy imports from out-of-state, or actions or behaviors that may otherwise render the system and the ISO Markets vulnerable to price manipulation to the detriment of their efficiency." ISO Market Monitoring and Information Protocol ("MMIP"), Section 2.1.3.

The ISO Tariff also prohibits "anomalous market behavior," which includes "unusual trades or transactions"; "pricing and bidding patterns that are inconsistent with prevailing supply and demand conditions"; and "unusual activity or circumstances relating to imports from or exports to other markets or exchanges." MMIP, Section 2.1.1 et seq.

Should it discover such activities, the ISO tariff provides that the ISO may take the following action:

1. Publicize such activities or behavior and its recommendations thereof, "in whatever medium it believes most appropriate." MMIP, Section 2.3.2 (emphasis added).

2. The Market Surveillance Unit may recommend actions, including fines and suspensions, against specific entities in order to deter such activities or behavior. MMIP, Section 2.3.2.

3. With respect to allegations of gaming, the ISO may order ADR procedures to determine if a particular practice is better characterized as improper gaming or "legitimate aggressive competition." MMIP, Section 2.3.3.

4. In cases of "serious abuse requiring expeditious investigation or action" the Market Surveillance Unit shall refer a matter to the appropriate regulatory or antitrust enforcement agency. MMIP, Section 3.3.4.

5. Any Market Participant or interested entity may file a complaint with the Market Surveillance Unit. Following such complaint, the Market Surveillance Unit may "carry out any investigation that it considers appropriate as to the concern raised." MMIP, Section 3.3.5.

6. The ISO Governing Board may impose "such sanctions or penalties as it believes necessary and as are permitted under the ISO Tariff and related protocols approved by FERC; or it may refer the matter to such regulatory or antitrust agency as it sees fit to recommend the imposition of sanctions and penalties." MMIP, Section 7.3.

Mrs. FEINSTEIN. This proves, for the first time, active and purposeful manipulation of the energy market in order to drive up prices and increase profits.

I thank the Federal Energy Regulatory Commission for the investigation which took place and began subsequent to our hearing on January 29 and my request to FERC that they conduct this investigation.

As Chairman Wood told the Energy Committee hearing: Sunlight is the best disinfectant. I am very pleased that, under his leadership, FERC is now practicing what Mr. Wood has preached.

But take note that these documents have sat within Enron for the last 18 months. This is 6 months after a subpoena was issued for them. And, finally, after all this time, the Enron board decided it would release the documents.

It is appalling that it took this long. It is precisely why the CFTC or FERC or some regulatory agency needs the authority to investigate. That was an authority that the CFTC had until the Commodity Futures Modernization Act was passed by this body in December of 2000.

That is the same month these documents were actually produced. It is exactly what Senator CANTWELL, Senator WYDEN, and I have been saying in the Energy Committee for more than a year. Had our derivatives amendment been in place, at least it would have ensured that for online trades, a regulatory agency would have had access to these documents and would have been able to investigate right away. I hope the 50 of my colleagues who voted against our energy derivatives amendment will reconsider their opposition.

Senator HARKIN, who is present in the Chamber, the chair of the Agriculture Committee, has said he would take a look at our legislation and mark it up. I am once again calling on his committee to hold hearings and mark up our legislation as soon as possible.

Congress must pass legislation to reinstate CFTC authority to oversee energy derivatives in the futures market and investigate fraud and manipulation of energy producers.

What do these documents mean for California and the Western States? Until now, FERC has never said it thought there was manipulation in the California and western energy markets. As such, it has taken a very conservative view with respect to refund proceedings, interpreting "just and reasonable" doctrines and reviewing long-term energy contracts. That means FERC-ordered refunds were very limited and very insignificant relative to "unjust and unreasonable" costs. Now

all of a sudden the landscape has changed. Manipulated spot markets lead to forward markets that were also manipulated, and thus long-term contracts also reflect unjust and unreasonable rates. So this means everything needs to be put back on the table by FERC.

I don't believe it was just Enron. I believe other companies were out there doing the same or similar things. In fact, one document, a December 2000 memo from two Enron employees named Yoder and Hall to another named Sanders, even fingers two other companies, Puget Sound and PowerEx, as having done the same thing.

These documents suggest that this may be beyond FERC at this point. That is why I am calling for the Department of Justice to investigate these memoranda, the companies, and other companies. I am also calling on FERC to take another look at contracts signed by California and other Western States with energy companies to see if future prices of energy were also manipulated by Enron. The evidence is now very clear that this was in fact the case.

I am also asking FERC to take another look at the refund proceedings. The evidence now exists that prices were unjust and unreasonable to a much larger extent than FERC had previously determined.

As my colleagues know, I have asked the Department of Justice to investigate, and here is why I believe there may well be outright fraud. There are three easy ways.

First, Enron sold power out of State and then bought it back. This enabled them to evade certain price caps and sell energy without a cap in order to receive a much higher price for their energy. This is referred to as megawatt laundering.

Second, by knowing that transmission lines were constrained and oversubscribed for a set hour, the company scheduled deliveries in order to get paid and not deliver. The net effect was that Enron got paid for moving energy to relieve congestion that they had no intention of actually ever moving.

Third, with simple sleight of hand, Enron could sell nonfirm energy to the power exchange as firm energy in order to get paid extra for ancillary services in the firm contracts when Enron was actually selling nonfirm power.

There are other examples documented on the Web site. Some are much more technical, with suspicious names such as Fat Boy, Get Shorty, and Death Star. I am sure there are yet other ways to manipulate the system, and perhaps other companies figured out other ways to do it as well.

I am also asking the Department of Justice to investigate the entire western energy market and those trading into it in the years 2000 and 2001. If there ever was a bugle call to action to fix what was wrong with the California and western energy markets from May of 2000 to June of 2001, this is it.

I yield the floor.

CUBAN BIOLOGICAL WEAPONS

Mr. NELSON of Florida. Madam President, I call to the attention of the Senate a shocking Associated Press story that was filed yesterday afternoon. I have not had a chance to read the papers today, so I don't know in which papers it was printed. This is a headline:

U.S. Official Says Cuba May Be Helping Rogue States With Biological Weapons.

I am going to read the first two paragraphs of this AP story:

The Bush administration said yesterday it believes Cuba has at least a limited offensive biological warfare program and may be transferring its expertise to other countries hostile to the United States.

We are concerned that such could support biological warfare programs in those States, said U.S. Under Secretary of State, John Bolton.

This is of grave concern to the Nation. If the Bush administration has hard evidence that Cuba is exporting biological weapons to our enemies, then the Bush administration should not just be making speeches about it. They ought to be planning an action in consultation with the Congress under the War Powers Act as to what to do about exporting biological agents to our enemies in this war on terrorism.

This would be absolutely unacceptable. What will the action be? That is where the consultation ought to be going on with Congress as to what the administration is planning. Don't make a speech that the AP story says was made to the Heritage Foundation. But, instead, let us talk about what the means are of stopping the exports of biological weapons and biological agents that would be going from Cuba to other terrorist states which are clearly out to do ill will to the interests of the United States.

Could it involve something more other than stopping the exports of biological weapons? Yes, it could. But that is what the planning ought to be about instead of just making speeches to think tank foundations.

I think this is a matter of gravest concern. Certainly, we have suspected, since Cuba is on our list of terrorist states, that this kind of activity might be going on. But, if it is, under the Constitution there ought to be consultation with the appropriate committees about any plans to protect the interests of the United States and not the Assistant Secretary of State making a speech to the Heritage Foundation.

I wanted to call this to the attention of the Senate. It has apparently not gotten much attention up to this point. I think it is of grave concern to the United States. It is clearly in the interest of the United States, if these weapons of mass destruction through biological agents are being produced or researched in Cuba, that it be stopped forthwith, and certainly any export to

other countries that would do us harm should be stopped dead in its tracks.

I yield the floor.

Mr. LUGAR. Madam President, I commend the distinguished Senator from Florida for his statement. The whole area of weapons of mass destruction is one of interest to me and to many Senators. Very clearly, the war against terrorism contemplates that we will be vigorous in trying to find the al-Qaida and other associates. But at the minimum, we must make certain they do not have access to materials, laboratories, or weapons of mass destruction, which would be catastrophic, whether it be from Cuba or countries in the Middle East, the Far East, Africa, or wherever.

Many of us have commented—including the distinguished Senator from Florida—about the worldwide extent of their war effort. The President has commented that it may be a long war for that very reason. I commend him for his statement.

I am hopeful the relevant committees have been informed. Perhaps the leadership of the Senate has been informed. But if not, that should occur quickly.

MANIPULATION OF ENERGY MARKETS

Ms. CANTWELL. Madam President, I rise today to discuss the documents that were released yesterday, which illustrate how Enron has manipulated energy markets in California and in many Western States. Based on yesterday's revelations, I believe ratepayers deserve prompt relief from Enron's trading practices. I think these documents show Washington State electricity consumers what they have suspected all along, that prices have been manipulated and they have, as a result, paid higher energy prices, many up to double-digit rate increases.

Many of you may have seen the articles. I want to have several of these printed in the CONGRESSIONAL RECORD. They emphasize the information that is being provided in documents I think my colleagues from California had printed in the RECORD.

The New York Times, the headline was:

Enron Forced Up California Energy Prices, Documents Show.

Another article that was printed in the LA times:

Memo Shows Enron's Role in Power Crisis. Energy: "Smoking gun" document by company lawyers reveals tactics used to create electricity shortage in California, then drive up prices.

Another in the Washington Post:

Papers Show That Enron Manipulated California Crisis.

I ask unanimous consent these be printed in the RECORD.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

[From the New York Times, May 7, 2002]

ENRON FORCED UP CALIFORNIA ENERGY PRICES, DOCUMENTS SHOW

(By Richard A. Oppel Jr. and Jeff Gerth)

WASHINGTON, May 6.—Electricity traders at Enron drove up prices during the California power crisis through questionable techniques that company lawyers said "may have contributed" to severe power shortages, according to internal Enron documents released today by federal regulators.

Within Enron, the documents show, traders used strategies code-named Fat Boy, Ricochet, Get Shorty, Load Shift and Death Star to increase Enron's profits from trading power in the state—techniques that added to electricity costs and congestion on transmission lines.

The documents—memorandums written in December 2000 by lawyers at Enron to another lawyer at the company—also describe "dummied-up" power-delivery schedules, the submission of "false information" to the state, and the effective increasing of costs to all market participants by "knowingly increasing the congestion costs."

The memos, which provide the first inside look at the complex trading strategies Enron used in California, give strong ammunition to state officials who have long argued that Enron and other power marketers manipulated the state's market and played a crucial role in the crisis that cost California consumers and utilities tens of billions of dollars in 2000 and 2001. The documents state that other power companies used similar techniques.

Tonight, Senator Dianne Feinstein, Democrat of California, said she would ask Attorney General John Ashcroft "to pursue a criminal investigation to determine whether in fact federal fraud statutes or any other laws were violated" by Enron's energy-trading activities. Federal prosecutors are already conducting an inquiry into Enron's accounting, which falsely increased reported profits but ultimately led to the company's filing for bankruptcy protection in December.

Enron agreed to sell its energy-trading unit earlier this year to UBS Warburg, a division of UBS, Switzerland's largest bank. Nearly all of Enron's senior executives, and most of its board members, have departed in the last nine months.

Enron's senior management learned of the documents in late April, and the company's board decided during a meeting on Sunday to waive attorney-client privilege and turn the memos over to investigators at the Federal Energy Regulatory Commission, a person close to the company said. The company has also informed the Justice Department, the Securities and Exchange Commission and the attorney general of California about the documents.

At a noon meeting today, lawyers for Enron gave the memos to investigators from the regulatory commission, which is examining whether Enron manipulated energy markets in the West. The agency released the documents a few hours later. Officials at the commission declined to comment, but they are continuing their investigation into Enron's effect on power prices and asked the company today to provide additional documents on its electricity and natural-gas trading activities.

In a letter sent by officials at the commission today to Enron, investigators at the agency said the documents described how Enron traders were "creating, and then 'relieving,' phantom congestion" on California's electricity grid. The documents also detail what investigators described as "megawatt laundering," in which Enron bought power in California, resold the power out of