Docket No.: R.07-05-025

Exhibit No.:

Date: February 25, 2011

Witness: Mark E. Fulmer

REPLY TESTIMONY OF MARK E. FULMER ON BEHALF OF THE DIRECT ACCESS PARTIES CONCERNING THE TRANSITIONAL BUNDLED SERVICE RATE, DIRECT ACCESS SWITCHING RULES, MINIMUM STAY PROVISIONS, AND ENERGY SERVICE PROVIDER FINANCIAL SECURITY REQUIREMENTS

I. INTRODUCTION AND SUMMARY

Q: Please state your name and business address.

A: My name is Mark E. Fulmer. I am employed by MRW & Associates, LLC. My business address is 1814 Franklin Street, Suite 720, Oakland, California.

Q: Are you the same Mark E. Fulmer who filed opening testimony on January 28, 2011 in this docket on behalf of the Direct Access (DA) Parties?

A: Yes, I am.

Q: What is the purpose of your reply testimony?

A: This testimony addresses portions of the opening testimonies sponsored by witnesses on behalf of Pacific Gas and Electric (PG&E), Southern California Edison (SCE), San Diego Gas and Electric (SDG&E) (collectively, the "IOUs"), the California Large Energy Consumers Association and California Manufacturers and Technology Association (CLECA-CMTA), and the Division of Ratepayer Advocates (DRA). Silence on any particular position taken by any of the three IOUs or any other party in this proceeding should not be interpreted as the DA Parties support for, or acceptance of, that position.

Q: Please summarize your rebuttal testimony.

A: First, in general, parties were in consensus that the Transitional Bundled Service rate should be calculated consistent with the Market Price Benchmark. The DA Parties recommend that the implementation details can, and should, be worked out in a future workshop.

Second, parties were in consensus that six months is an appropriate length of time for a customer to notify the host IOU of its intention to return to bundled service. The

DA Parties continue to disagree with the IOUs that a six-month notice is necessary for bundled customers begin DA service.

Third, the IOU testimonies provide no evidence that there is any benefit to setting the minimum stay on bundled service at 18 months rather than the 12 months proposed by the DA Parties.

Fourth, there are a number of flaws in the formula proffered in the CCA Bonding Settlement that make it inappropriate for use in setting the Financial Security Requirement (FSR) for Energy Service Providers. As such, it should not be adopted.

Fifth, any FSR model that is ultimately adopted must be premised on data and inputs that are fully available to those who will be required to provide financial security as determined by that model, including access to all formulae and inputs.

II. THERE IS GENERAL CONSENSUS ON THE TRANSITION BUNDLED RATE

Q: In opening testimony, the DA Parties recommended that the Transition Bundled Service (TBS) rate be calculated in a manner consistent with the market price benchmark (MPB). Did other parties agree?

A: Yes. The three utilities, as well as Dr. Barkovich for CLECA-CMTA, and Mr. Owyang for the Division of Ratepayer Advocates all agreed in principal with the DA Parties that the TBS rate should be calculated consistent with the MPB.[1] This consensus is one of the productive results that came out of the Workshops held in December 2010 and January

[1] PG&E at 2-3; SCE at 32; SDG&E (Choi) at TC-3; Barkovich at 16-18; Ouyang at 12. Intervener Jan Reid is silent on this issue.

2011. The DA Parties recommend that the details of matching the TBS rate to the MPB be worked out in workshops once the Commission rules on the MPB.

III. SWITCHING RULES AND MINIMUM STAY PROVISIONS

Q: In opening testimony, the DA Parties recommended that a customer returning to bundled service provide six months notice to the host utility of its action. Was there consensus on this issue?

A: In general, yes. However, not all parties agreed with the DA Parties that voluntarily and involuntarily returned customers should be treated differently. PG&E and SCE asserted that an involuntarily returned customer should be placed directly on bundled service rather than a TBS rate like all other returning DA customers. Both the DA Parties and the utilities agree that whether or not an involuntarily returned DA customer may be placed on TBS or bundled service is a question of interpreting PUC Code Section 394.25(e). As this issue is being concurrently briefed, the DA Parties did not provide factual testimony on the matter.

Q: The three IOUs all recommend keeping the current requirement that bundled customers provide six month notice prior to taking DA service. In opening testimony the DA Parties argued that this notification period was not necessary and that assuming there was room underneath the cap, a bundled customer should be able to take DA service on the next billing cycle. Did the IOUs offer any viable rationale for keeping the six-month notice?

A: Each IOU offered a different reason for the six-month notice provision for customers going from bundled to DA service, none of which were convincing. PG&E seemed to suggest that it was needed by ESPs: "Because ESPs have similar obligations as IOUs (e.g., administrative implementation, RA compliance filings), the notice period for customers returning from DA to bundled service should also be six (6) months."[2] The DA Parties, including the ESPs, do not see the 6-month notification to take DA service as necessary. SCE argues that it is needed to account for selling excess RA and energy, which it may be forced to do at a loss.[3] This argument does not acknowledge the current capped DA market, nor the magnitude of the departure of a single or a few DA customers at a time relative to their overall bundled load and the myriad of other uncertainties SCE must plan for. SDG&E, on the other hand, argues that the six month notification is required precisely because of the re-opened market.[4] However, the examples Mr. Spurgeon provides relate more to growing pains of the transitional period than any ongoing issues that would warrant the 6-month notification.

Q: SCE argues (in a footnote) that "The Commission should impose on ESPs the same requirement that CCAs have to provide a minimum one-year advance notice to the IOU of a voluntary service termination, which results in a mass involuntary return of CCA customers to IOU procurement service."[5] Is this recommendation reasonable?

A: No. SCE has offered no rationale for this proposal. Furthermore, this recommendation is flawed with respect to ESPs, primarily because an ESP's contracts with its customer have

[2] PG&E at 3-5
[3] SCE at 8.
[4] SDG&E at JS-4.
[5] SCE at 64, footnote 52.

varying terms and conditions, including different expiration dates. Therefore, if an ESP were to decide to stop serving retail load in California, it would most likely simply cease any effort to renegotiate its existing contracts or execute contracts with new customers. A good example of this is the exit of APS Energy Services (APSES) from the California market in 2008. A year before exiting the market, APSES voluntarily notified the Commission and its customers (and presumably the IOUs) of its intent so as to ease the transition. It fully served all its customers through the expiration of each contract (or arranged for another ESP to serve the customer for the remainder of the contract) to the point when in July 2008 it withdrew its ESP registration. This process allowed its customers ample time to negotiate with other ESPs or provide notice to their host IOUs of their intent to return to bundled service. While APSES provided a year's notice of its intent to exit the market, there was no mass involuntary return of customers to IOU service that resulted.

Furthermore, as described in the DA Parties' opening testimony, when an ESP exits the market without breaking any of its contracts, or simply cannot come to agreement with a customer concerning a contract renewal or extension, that customer cannot for these purposes be considered "involuntarily returned." If the definition of "involuntarily returned" was broadened to encompass such situations, a customer could simply not negotiate in good faith and thus receive any potential benefits of being "involuntarily" returned , such as (as proposed by utilities) returning to bundled service rather than TBS. This is clearly not reasonable.

Q: The three IOUs all recommend that if a customer returns to bundled service after having been on direct access service that the customer must remain on bundled

service for at least 18 months. The primary rationales for this position are to prevent price arbitrage between DA and bundled service (in particular with respect to seasonal rates) and to allow the IOUs to better manage procurement obligations. How do the DA Parties respond?

A: Neither of these reasons justifies an 18 month minimum stay. Seasonal price arbitrage can just as well be prevented with 6 months notice for a DA customer to return to IOU service along with a 12 month minimum stay (as proposed by the DA Parties). Second, in their testimonies supporting the six-month notification provision, all three IOUs say that six months is enough to modify their portfolio to deal with DA customer returns.[6]

IV. FINANCIAL SECURITY REQUIREMENTS (GENERAL)

Q: The DA Parties argued in briefs that involuntarily returned customers should be placed on the TBS rate and in opening testimony that the FSR should be calculated based on six months of reentry fees. What then is the purpose of this portion of the rebuttal testimony?

A: The issue of whether involuntarily returned customers must be returned to fully bundled service or whether they can be put on TBS service for six months is being addressed via briefs submitted by the parties on January 24, 2011 and February 3, 2011. Regardless of how the Commission rules on that issue, there are specific problems with the CCA bond model proposed by PG&E and SCE that should lead the Commission to reject it as the tool by which the FSR is calculated.

[6] SCE at 8; PG&E at 3-4 – 3-5; SDG&E at JS-4.

Q: In your response above, only PG&E and SCE are identified as sponsoring the CCA Bond model for calculating the ESP FSR. What was SDG&E's position?

A: SDG&E stated that the DA customers in workshops expressed a willingness to be potentially subjected to the TBS rate in the event of an involuntary return, and that their paying the TBS rate would protect bundled customers from the risk that an involuntary return of DA customers would impose costs on them.[7] As such, SDG&E's main recommendation, should the DA Parties position on the issue prevail, was for the DA customer to sign and return to SDG&E and acknowledgment form.[8] The DA Parties have no objection in principal to such a form, but would request that the language of the form be reviewed and approved by the Energy Division.

a. THE FSR SHOULD ONLY BE CALCULATED OVER 6 MONTHS

Q: The CCA Bond model proposed by PG&E/SCE assumes that if there is a "catastrophic event" where one or more major ESPs fail, the involuntarily returned DA load would be on IOU service for <u>at least a year</u>. Is this a reasonable assumption?

A: No. In fact, the DA Parties believe that it is more likely that involuntarily returned customers would elect new DA service rather than remain on IOU service, unlike involuntarily returned CCA customers, who must remain on IOU service. The CCA Bond Model does not account for this. Additionally, these returned DA customers opted into direct access in the first place for the benefits DA service provided. This same desire

[7] SDG&E, Spurgeon at JS-7 – JS-8.
[8] SDG&E, Spurgeon at JS-8.

and benefits do not vanish in this scenario and so the assumption that a customer would quickly try to secure another direct access arrangement to meet their own energy needs is far more plausible and reasonable.

Q: Why should this be accounted for?

A: First, the DA Parties propose switching rules that allow such customers a greater flexibility so as to allow in involuntarily returned DA customer to choose another ESP and thus remain on Direct Access. Even the IOU proposals on switching rules and minimum stay provisions allow involuntarily returned customers a Safe Harbor to return to DA service.

Second, in the only case in California that could be considered catastrophic, the 2000/2001 power crisis, DA customers who were returned to IOU service did not remain on IOU service for a full year, as is implied in the proposed CCA Bond model. Instead, they overwhelmingly returned to DA service. This is clearly shown in the figure below, which graphs the penetration of DA load as a fraction of total IOU load during the crisis. The figure shows DA load bottoming out at about 2% of total load in the spring of 2001, but returning to, and even exceeding, the pre-crisis levels within six months. This further demonstrates the points made earlier that customers see benefits by being served on direct access and they will continue to seek the right DA program if , for some reason, their ESP can no longer serve them.

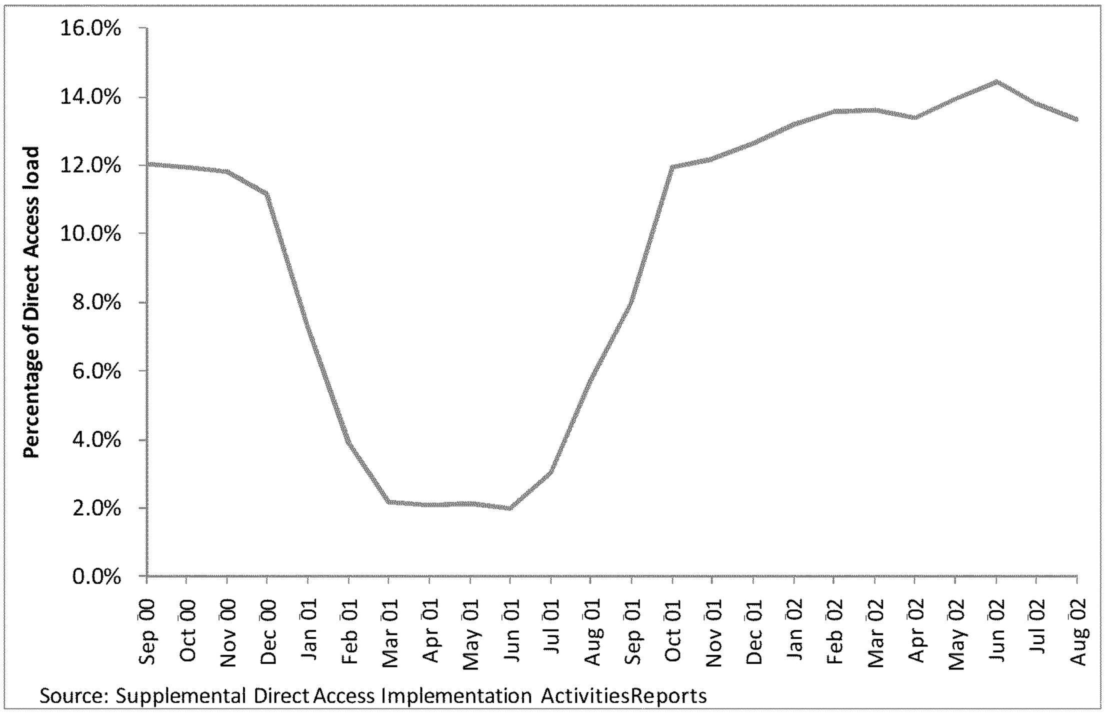

Figure 1. DA Penetration, September 2000 through August 2002

This simply and clearly illustrates that the assumption implicit in the proposed CCA Bond model that involuntarily returned DA customers will stay on IOU service for a year is inaccurate. Even in the worst-case scenario experienced almost exactly 10 years ago, the DA load that was involuntarily returned to IOU service quickly went back to direct access.

Q: Since a full year is clearly the wrong time frame to use in calculating the ESP FSR, what do the DA Parties recommend?

A: As noted in the DA Parties' opening testimony, six months is the appropriate time frame over which to calculate the ESP FSR.

b. SCE OVERSTATES THE RISK OF ESP'S FAILURE

Q: SCE notes in its testimony that "[t]he risk that an ESP will involuntarily return its customers to IOU procurement without notice during stressed market conditions must be considered."[9] Do you agree?

A: While the risk should that an ESP will involuntarily return its customers should be considered, SCE consistently, explicitly and implicitly, overstates that risk.

Q: On page 35 of its opening testimony SCE states "ESPs, like CCAs are not required to engage in hedging/contracting like the IOUs." Is this an example of exaggerating risk?

A: Yes. The statement implies that ESPs and CCAs will not hedge their risk without a regulator looking over their shoulder. This ignores the obvious fact that most business enterprises that hedge are not ordered to do so by the government. No non-regulated entity is *required* to hedge, but they do so as part of their own portfolio risk management, as it simply is sound business practice. In fact, they have much more incentive to engage in hedging strategies than regulated entities, who may simply just ask the regulators to allow them to collect the additional revenue when market events cause their costs to increase. ESPs are keenly aware of the value of properly hedging their portfolio; this should not be discounted and cannot just be assumed away because they are not subject to regulatory oversight.

[9] SCE at 35.

Furthermore, the paragraph that follows this hedging statement in SCE's testimony is full of "mays" and "coulds," as it paints the downfall of ESPs. The factors that SCE raises—shorter-term purchasing horizons, possible stressed markets, cash flow lags and liquidity requirements—seem to inevitably lead, like a Greek tragedy, to the downfall of the ESP as its "credit lines run out and cash dries up." While colorful, all of the risks and points raised are obvious, and thus would be addressed by a reasonable ESP, who, as just noted, has a down-side risk from which the IOUs are protected.

Q: SCE also notes that an ESP could intentionally drop all its customers: "However, having long-term contracts 'in the money' during a stressed market may also create a financial incentive for an ESP to terminate service, return its customers to IOU procurement service, and sell the long-term contract for a higher price, as at least one ESP was accused of doing during the California energy crisis. Nothing prohibits an ESP from terminating its service in order to cash in on a valuable long-term contract in a stressed market."[10] Is this a reasonable concern?

A: No. Abrogating all contracts for a one-time gain is business suicide. Not only would an ESP who did this face years of litigation from angry former customers, it is highly unlikely that they would ever be able to serve another DA customer again, even if the Commission allowed it to renew its ESP registration.

Q: But SCE points out that "California saw ESPs dump their customers onto the IOUs during the energy crisis in 2000-01."[11] Why did that happen?

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[10] SCE at 36.
[11] SCE at 35.

A: The key reason was that SCE and PG&E stopped paying the Power Exchange Credit ("PX Credit"). Under decision D.99-06-058, the utilities were required, depending upon the billing arrangement, to provide the DA customer or ESP with the PX Credit—effectively the avoided cost of not serving that customer—even if that cost exceeded the rate. What happened starting November 2000 is succinctly put by Peter W. Hanschen and Gordon P. Erspamer in their *Electricity Journal* article:[12]

> Unlike the utilities that had not mitigated or hedged the risk of their wholesale electric purchases, many of the ESPs used the PX Credit as a hedge against escalating energy prices. While the ESPs had to purchase electricity in energy crisis markets, the PX Credit acted as a hedge because it tended to increase as there were increases in wholesale markets. When the IOUs stopped making these payments, the ESPs' hedge was suddenly eliminated. Consequently, the ESPs had no other choice but to return their direct access customers to utility bundled service.

Thus, the returning of DA customers to IOU service was not a function of ESP failure to hedge, but rather they were victims of the same power crisis that drove PG&E into bankruptcy.

V. EVEN IF THE FSR INCLUDES PROCUREMENT EXPOSURE, THE SCE/PG&E PROPOSAL IS FLAWED

a. THE CCA BOND MODEL RESULTS IN GROSSLY EXCESSIVE FSR AMOUNTS

[12] Hanschen, Peter W. and Gordon P. Erspamer "A Public Utility's Obligation to Serve: Saber or Double-Edged Sword?" *Electricity Journal,* December 2004. pp 44-45.

Q: The CCA Bonding Settlement, which was attached to PG&E's and SCE's testimony, showed a sample calculation of the proposed FSR model. Were those actual, real values that would have represented the CCA Bond amount (or ESP FSR amount) had it been calculated at a specific point in time?

A: No. In discovery, PG&E (the author of the model) stated that the volatility values in the sample calculation were illustrative.[13]

Q: Have either of the two utilities provided any estimates of the model output with real data?

A: In response to a data request by the City and County of San Francisco, SCE provided a spreadsheet that contained values of the average generation rate, stressed generation rate, derived average volatility, and resulting stressed procurement price and resulting Bond amount on a $/MWH basis (setting aside for now administrative costs) every six months from January 2005 through July 2010.[14] While the data contained derived average volatility rather than implied volatility at the time, it is the closest to real values that have been provided to date.

Q: What do these values show?

A: These values show that had the model been used in that time period, the CCA Bond / ESP FSR would have varied from zero to over $55/MWh. Assuming a large ESP with 2 million MWh of sales in SCE's service area, the FSR that the ESP would have to provide

[13] PG&E response to Joint Parties discovery question 13(b).
[14] Joint Responses of Pacific Gas and Electric Company (PG&E) Southern California Edison Company (SCE) and San Diego Gas & Electric Company (SDG&E) to Information Requests from City and County of San Francisco and Marin Energy Authority Regarding Bond Settlement, October 2011, question 3.

would have varied from zero to $112 million. Assuming that the ESP would have had proportionally similar loads in the other two IOU service areas, the total state-wide FSR would have gone as high as $250 million.

Q: Have the DA Parties estimated what SCE's actual exposure would be had that ESP failed during each of those periods?

A: Yes. SCE's actual exposure was calculated by comparing the revenue it would have received had the returned DA customers been placed on bundled service to the cost it would have incurred to serve those customers from the spot market. Thus, for each 12-month period beginning either January 1 or July 1, the DA Parties estimated the TBS rate (the cost to serve the customers) assuming that the DA Parties recommendation implemented, except for the green benchmark, as there were no RPS requirements at the time. The commodity component of the TBS was estimated by taking a weighted average of the peak and off-peak daily SP-15 values from Platt's *Megawatt Daily*. The difference between this estimated TBS rate and the actual average generation rate (as provided by SCE in response to CCSF's discovery) would represent the per-unit actual exposure. This per-MWH exposure was multiplied by the annual estimated sales of the large ESP, 2 million MWh per year, to arrive at the total exposure.

Table 1 and Figure 2 below compare the ESP FSR amount to the calculated actual exposure. As is clearly shown, the actual exposure—the TBS rate minus the bundled rate—has rarely, on an annualized basis, been positive. This is in contrast to the FSR amounts, which would have averaged about $25 per MWh served by the ESP.

Table 1. Calculation of Bond Amount and SCE Exposure Assuming the CCA Bond Model and an ESP serving 2 million MWH per Year

FSR Calculation Date	Jan-05	Jul-05	Jan-06	Jul-06	Jan-07	Jul-07	Jan-08	Jul-08	Jan-09	Jul-09	Jan-10
Stressed Price, $/MWh	$100.12	$118.10	$162.90	$130.12	$126.86	$125.80	$111.64	$150.33	$108.81	$80.63	$97.09
Stressed Rate, $/MWh	$83.00	$96.50	$110.00	$103.50	$97.00	$95.00	$93.00	$94.50	$96.00	$90.50	$85.00
Difference, $/MWh	$17.12	$21.60	$52.90	$26.62	$29.86	$30.80	$18.64	$55.83	$12.81	-$9.87	$12.09
FSR/Bond Amount (millions)	$34.2	$43.2	$105.8	$53.2	$59.7	$61.6	$37.3	$111.7	$25.6	$0.0	$24.2
TBS Rate per DA Parties, $/MWh	$78.96	$78.92	$66.84	$71.20	$71.79	$83.00	$84.47	$59.35	$45.67	$49.13	$56.39
Average Generation Rate, $/MWh	$73.00	$86.50	$100.00	$93.50	$87.00	$85.00	$83.00	$84.50	$86.00	$80.50	$75.00
Difference, $/MWh	$5.96	-$7.58	-$33.16	-$22.30	-$15.21	-$2.00	$1.47	-$25.15	-$40.33	-$31.37	-$18.61
Actual Exposure (millions)	$11.9	$0.0	$0.0	$0.0	$0.0	$0.0	$2.9	$0.0	$0.0	$0.0	$0.0
Difference, FSR - Actual Exposure	$22.3	$43.2	$105.8	$53.2	$59.7	$61.6	$34.3	$111.7	$25.6	$0.00	$24.2

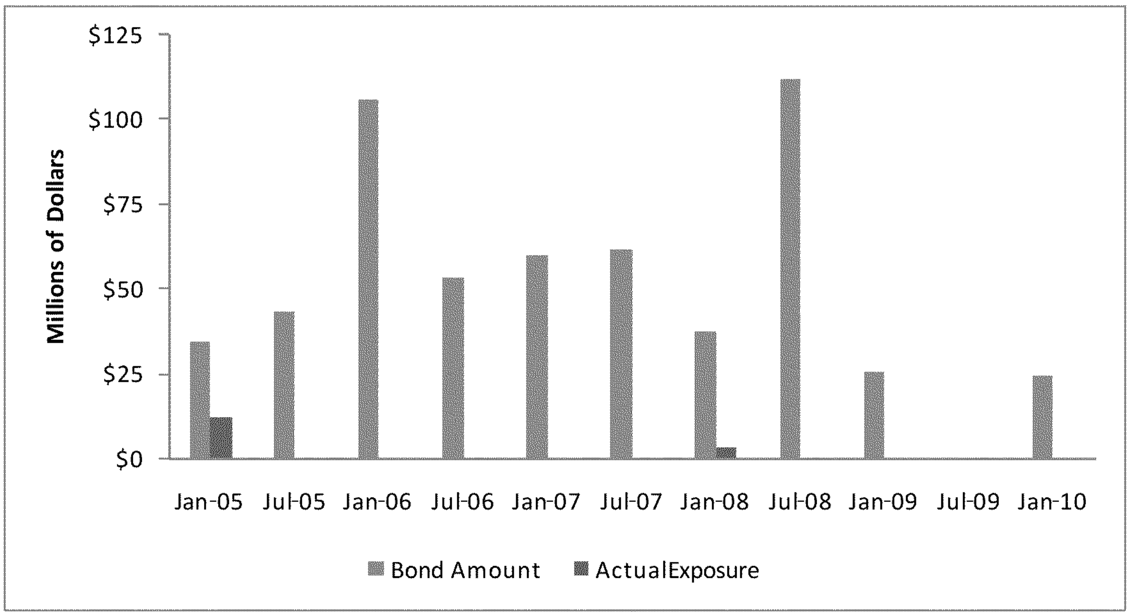

Figure 2. Bond Amount and SCE Exposure Assuming the CCA Bond Model and an ESP serving 2 million MWH per Year

b. IMPLEMENTING THE PROPOSED CCA BOND MODEL COULD RESULT IN PERVERSE, UNINTENDED HARMFUL CONSEQUENCES

Q: The historical FRS estimates above showed that an ESP with 2 million MWhs of load could have faced a bond amount of over $100 million. Could it be even higher than this?

A: Yes. Both prices and volatilities could conceivably exceed that which SCE estimated for July 2008. In those cases, an ESP could quickly be faced with a sudden liability on the same order of magnitude as its annual gross revenue. This would stress even a healthy company. If it were not in a position to come up with credit, cash or bond equal to its annual revenue then the Commission could conceivably revoke the ESP's registration, causing the very situation that the FRS is supposed to protect against: a large number of returned ESP customers returned to regulated IOU service.

c. THE IMPLIED VOLATILITY DATA ARE NOT RELIABLE OR CONSISTENTLY AVAILABLE

Q: An important input to the proposed FSR amount calculation is the implied volatility. PG&E's testimony claims that "there should be no doubt as to its availability to anyone in the public."[15] Is this true?

A: No. Amerex Brokers, LLC, the source of implied volatility listed by PG&E in its testimony, expressly would not allow the DA Parties' technical consultant, Mark Fulmer, to receive even a sample copy of a broker's sheet with implied volatilities. This is

[15] PG&E at 4-15

because of Amerex's policy not to sell or in any way provide data to consultants. Clearly, these data are NOT available to anyone in the public.

Q: What about other sources for implied volatility?

A: The City and County of San Francisco attempted to verify the public availability of implied volatility data from sources beyond Amerex. CCSF contacted five major brokers and energy data provider and was told that there is no publicly available data or even subscription serve data for implied volatility at NP15.[16] CCSF further reported that "PG&E used SP15 data to estimate the necessary implied volatility values for NP15."[17] Furthermore,

> CCSF has been informed by Amerex that it is only able to provide "indicative data," meaning that the data are based in whole or in part on estimates or approximations of what prices would have been in a given period. Typically, indicative data are provided when either no transactional data are available, or the data aggregator believes that insufficient transactional data are available to provide a reliable price indicator for the given period.[18]

While Amerex would not provide the DA Parties' consultant sample data, Mr. Fulmer did speak with the Amerex contact identified by PG&E in its testimony. Ms. Mundy (formerly Ms. Gist) confirmed CCSF's statements: Amerex does not provide quotes for volatility at NP15, and the SF15 implied volatility quotes are merely indicative and are available only to direct users.

Q: To summarize, there are no sources for implied volatility for NP15 and the single source for SP15 indicative volatility data is based on broker estimates. Should the Commission impose costs on ESPs and CCAs based on such weak data?

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[16] R.03-10-003, (Revised) Comments Of The City And County Of San Francisco On The Proposed Decision Of Administrative Law Judge Yip-Kikugawa, December 9, 2010, at 5.
[17] Ibid.
[18] Ibid. at 6

A: No. Requiring such a potentially large and varying FSR on an ESP, the cost of which would inevitably be paid by its customers, based in large part the estimate of a broker who does not answer to the Commission is clearly unreasonable.

d. THE RATIONALE BEHIND CALCULATING THE FRS BASED ON THE 95TH PERCENTILE IS FLAWED

Q: SCE states in testimony that "The 95 percent confidence interval represents a one-in-twenty (1-in-20) event and was adopted by the Commission in D.07-12-05 as the confidence interval to be used by IOUs to manage rate level risk for bundled service customers. This same confidence level should apply to forecasting the possible reentry fees that could occur. The bond should provide the same level of protection that the bundled service customers currently have." Is the bundled ratepayer risk being addressed in D.07-12-025 analogous to the risk bundled customers face from involuntarily returned DA customers?

No. The problem is that when a 95 percent confidence interval is applied to the IOUs management of market risk in their procurement portfolio, as called for in D.07-12-025, the result is a level of hedging that is designed to protect bundled customers against market risk: if the IOU doesn't hedge based on a 95 percent confidence level, then there is a 5% risk that rates will be unacceptably high. In the FSR case, even if the market events that result in wholesale costs that are above the 95th percentile, there is still a large likelihood that the IOU will not bear any costs: simply because the wholesale prices are exceptionally high DOES NOT in itself mean that that an ESP will default. The probability of the ESP actually defaulting is not accounted for; the model effectively assumes that if these prices are reached, then the ESP will default. As discussed above, an ESP defaulting due simply to high market prices is highly unlikely. But the FSR model calculates the IOU potential exposure implicitly assuming a default <u>will</u> occur when the prices reach the 95th percentile.

VI. ANY FSR MODEL MUST BE FULLY AVAILABLE TO THOSE WHO PAY THE RESULTING AMOUNT

Q: Is it reasonable for an ESP to simply post tens, if not hundreds of millions of dollars of surety based on the unverified calculations of a competitor?

A: Clearly it is not. It is, in fact, irresponsible. If this or any other model is used to calculate an ESP FSR, or CCA Bond amount for that matter, it must be provided in its entirety to those paying the FSR or Bond.[19] This is only fair. There should be nothing in the model that can be treated as confidential. The unattractive alternative is to have each ESP (and CCA) keep parallel calculations and protest to the Commission if their shadow calculations do not result in the same FSR (or Bond) as that presented in an invoice from the IOU. Any dispute would be much more quickly and easily resolved if the IOUs would provide to the ESP the underlying model and data each time the FSR is calculated.

Q: Does this conclude your testimony?

A: Yes.

[19] This would likely require the ESP or CCA to have the appropriate subscription(s) or the permission of the provider of the market data (e.g., Amerex for volatility).