THE UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

San Diego Gas & Electric Company, Complainant,	)	
v.	)	**Docket No. EL00-95-045**
Sellers of Energy and Ancillary Services Into Markets Operated by the California Independent System Operator and the California Power Exchange, Respondents.	)	
Investigation of Practices of the California Independent System Operator and the California Power Exchange	)	**Docket No. EL00-98-042**

SUMMARY OF THE PREPARED REBUTTAL TESTIMONY OF
DR. ERIC HILDEBRANDT ON BEHALF OF
THE CALIFORNIA INDEPENDENT SYSTEM
OPERATOR CORPORATION

In his Rebuttal Testimony, Dr. Eric Hildebrandt responds to statements and arguments made by witnesses who have filed initial and supplemental responsive testimony concerning the calculation of mitigated prices on behalf of other parties in these proceedings .

After providing an overview of the arguments to which he is responding, Dr. Hildebrandt summarizes his fundamental disagreements with the witnesses for suppliers, most importantly, his disagreement with these witnesses as to the approach that yields overall results that are most consistent with the Commission’s ultimate goal of just and reasonable prices that are, on average, reasonably good proxies for competitive market prices over the refund period as a whole. Ex. No. ISO-19 at 3:1-

8:14. In order to illustrate the methodological flaws proposed by sellers, Dr. Hildebrandt provides a comparison of the results produced by the methodology presented in his initial testimony to the results produced by the methodologies offered on behalf of the sellers. Ex. No. ISO-19 at 8:16-14:22.

In Section II of his testimony, Dr. Hildebrandt responds to arguments made by witnesses for sellers concerning the ISO's methodology with respect to ten key issues. First, Dr. Hildebrandt addresses the arguments made by these witnesses that average heat rates should be used to calculate the mitigated price, rather than the incremental heat rates used by the ISO, and explains that the use of average heat rates is not justified under the Commission's orders, is not necessary to ensure that generators receive payment for all fuel and variable operating costs for each 10-minute interval, and is inconsistent with economic principles. Ex. No. ISO-19 at 15:4-33:16.

Dr. Hildebrandt next discusses the argument made by sellers' witnesses that the heat rate of a unit should be selected based on its metered generation level, rather than the level at which the unit was dispatched to provide Imbalance Energy in the ISO's Real Time Market, pointing out that this proposal is inconsistent with the Commission's orders, and would perversely reward generators for not delivering energy pursuant to ISO dispatch instructions. Ex. No. ISO-19 at 33:18-39:22.

Third, Dr. Hildebrandt responds to contentions made by sellers' witnesses that the ISO improperly excluded a number of units from the "universe of units" to be used in calculating the mitigated price, including units called by the ISO to provide energy out-of-market ("OOM") or out-of-sequence ("OOS"). Dr. Hildebrandt states that including such units is inconsistent with the direction that the ISO choose units dispatched through its Real Time Market. Ex. No. ISO-19 at 40:1-42:10.

Fourth, Dr. Hildebrandt explains that treating units that determining the marginal unit based on the maximum cost of any unit providing either incremental or decremental, as proposed by several witnesses for sellers, is contrary to numerous references in the Commission's order that require the ISO to base the mitigated price on the "last unit dispatched to meet load" in the ISO's Real Time Market, and is inconsistent with how prices are determined in the ISO's Real Time Market and basic economic principles. Ex. No. ISO-19 at 42:12-51:6.

Fifth, Dr. Hildebrandt responds to the argument made by several witnesses that the ISO's methodology for determining the mitigated price during intervals in which no gas-fired unit was dispatched is inconsistent with the Commission's orders. Dr. Hildebrandt notes that the Commission's orders do not address this specific situation, and that no other witnesses provide an alternative that finds any basis in the Commission's orders. Ex. No. ISO-19 at 52:1-53:10.

Sixth, Dr. Hildebrandt addresses sellers' contention that the "universe of units" should include units that were not called on by the ISO, but generated energy through an uninstructed deviation or residual energy, pointing out that this proposal conflicts with the Commission's instruction that the ISO calculate the mitigated price based on units that are actually "dispatched" in an ISO market. Ex. No. ISO-19 at 53:12-54:6.

Seventh, Dr. Hildebrandt explains that units scheduled only through the PX should not be included in the "universe of units," as maintained by some witnesses for sellers, because units only scheduled through the PX do not directly affect prices in the

ISO's Real Time Market, and is inconsistent with the direction to calculate the mitigated price based on units "dispatched" in the ISO's markets. Ex. No. ISO-19 at 54:8-54:23.

The eighth issue Dr. Hildebrandt addresses is the ISO's exclusion of non-gas fired resources and imports from the "universe of units" eligible to set the mitigated price. Dr. Hildebrandt states that the Commission has clarified that neither type of resource should be eligible to set the mitigated price. Dr. Hildebrandt clarifies that the ISO may have included several units that were not capable of burning natural gas, and notes that these units should be excluded if this was actually the case. Ex. No. ISO-19 at 55:2-57:17. Dr. Hildebrandt also discusses the recommendation made by a witness for the California Parties that the ISO should exclude "dual fuel" units, stating that if it can be established that these units were not burning gas, then they should be excluded from any future mitigated price calculations. Ex. No. ISO-19 at 59:8-60:8.

Finally, Dr. Hildebrandt responds to the weighted average proposal made by Mr. Tranen on behalf of the California Generators for calculating average hourly mitigated prices for use in determining refunds in the PX and Ancillary Services markets. Dr. Hildebrandt explains that Mr. Tranen's proposal is inconsistent with the July 25 Order, mathematical logic, and the ISO Tariff.   Ex. No. ISO-19 at 60:10-66:8.

In Section III of his rebuttal testimony, Dr. Hildebrandt addresses several issues raised in the testimony of other witnesses that have been definitively addressed in the December 19 Order or are the subject of pending requests for clarification or rehearing before the Commission. First, Dr. Hildebrandt responds to the contention that the Commission intended the mitigated price to act as a replacement market clearing price rather than a cap on prices for intervals during the refund period, explaining that such a view is inconsistent with specific language in the Commission's orders, economic principles, as well as the overall goal of this proceeding. Ex. No. ISO-19 at 67:8-71:12. Dr. Hildebrandt then explains that the Commission has explicitly ruled that the mitigated price should be applied to transactions in the Ancillary Services market, Ex. No. ISO-19 at 71:14-72:8, and that emissions and startup costs should not be factored into the calculation of the mitigated price. Ex. No. ISO-19 at 73:9-74:29. Finally, Dr. Hildebrandt addresses the allegation made by Mr. Adamson that the ISO and CDWR sought to lower the historical market clearing price by purchasing OOM or OOS energy. Dr. Hildebrandt notes that Mr. Adamson has provided no evidence of this practice, and points out that the quantities of imports into the ISO system does not demonstrate any such "overpurchasing." Ex. No. ISO-19 at 75:1-77:18.