December 8, 2009

Ms. Lucille Van Ommering  
California Air Resources Board  
Office of Climate Change  
1001 I Street  
Sacramento, CA 95814

RE: Updated AB 32 Economic Analysis Workshop on November 18, 2009

Dear Ms. Van Ommering:

Sempra Energy (Sempra) submits these comments concerning the Updated AB 32 Economic Analysis discussed at the Staff Workshop on November 18, 2009. While Sempra was expecting more interaction with ARB Staff (Staff) on economic modeling throughout 2009, we appreciate the ability to comment before the economic analysis is finalized. Californians deserve a reasonable analysis of the consequences of AB 32 on the State. In that light, Sempra was somewhat surprised that the economic analysis presentation focused on the cap-and-trade program only and did not include any updated information on the expected costs and savings of the complementary measures.

**Issues Identified**

**Reference Case**

Sempra disagrees with the Staff approach of incorporating the low carbon fuel standard (LCFS) into the reference case. By putting the LCFS into the reference case, its costs are excluded from the economic analysis while its emissions reductions are included. The LCFS was clearly adopted as an AB 32 measure and the incremental costs and benefits over 2007 EISA biofuels requirements should be incorporated into the AB 32 analysis.

**Small Natural Gas Users’ Consumption.** The reference projection for residential and commercial GHG emissions shows a steady increase over the period 2006 to 2020. This assumption seems non-intuitive given that natural gas use in these sectors has not increased in California in the last 35 years in spite of population and economic activity increases. Given the history, the 0.9 percent to 1.3 percent growth in energy use and associated GHG emissions seems unlikely and will likely overestimate the costs of compliance with the cap-and-trade program.

**Electricity consumption.** Electricity consumption in the reference case is about 10 percent less than the California Energy Commission’s (CEC’s) 2009 IEPR forecast in all years between 2012 and 2020. While the growth in electricity consumption in the ARB forecast may be similar to the IEPR forecast, the reference case forecasted consumption will likely underestimate the GHG emissions from the electric sector and the costs of complying with a cap-and-trade program.
Cap-and-trade Program Modeling

Banking. The presentation indicated that unlimited banking was allowed in the model. However, in the various scenarios (6 and 7), the allowance price rises significantly only in the last two years. This would seem to indicate that either the shortfalls in the complementary policies are assumed to be unanticipated surprises or the banking function element of the model is not working properly.

Allowance Allocation. As indicated in the workshop, this element was applied only to the electric sector and was applied based on the incorrect assumption that all generation was owned by local distribution companies (LDCs). Based on that incorrect assumption and that allowances would be used to lower average prices, the cost for free allocation of allowances was higher than for an auction. While Sempra Energy believes that auctioning allowances is the correct method, this specific analysis is flawed in several respects and Sempra recommends this scenario not be included in the analysis for the following reasons. First, the assumption about the structure of the market was incorrect; there are many non-LDC wholesale generators in the market. A free allocation of allowances to those entities would not likely result in funds going back to consumers. Second, LDCs can return funds directly to ratepayers or can apply those funds by adjusting average prices. As the EAAC committee report has shown, the same result can often be achieved through the distribution of allowance value from an auction as well as free allocation of allowances. Indeed, Sempra’s previous comments provided to the EAAC describe why an auction, with the subsequent distribution of the revenue back to the ratepayers, would be preferable to direct allocation of allowances for reasons of market liquidity and transparency. The Energy 2020 model is not suited for addressing neither electricity rate design nor the complexities of various auction revenue allocation schemes. Clearly defined allowance allocation scenarios are best analyzed through EDRAM. As such Sempra recommends the Energy 2020 modeling effort not include scenarios based on auction versus free allocation in the California only electric sector analysis. The most likely result is that any conclusions from such an analysis are likely suspect and the time and energy used to create them could be better spent answering other questions.

Scenarios

Sempra fully supports the approach of Staff in analyzing the economic impacts of AB 32 under various scenarios regarding the impact of the complementary measures. Scenarios 5-7 provide significant information on the relationship of the complementary policies to the cap-and-trade program. Together, the full cost of AB 32 can be assessed with the ARB economic modeling tools. However, Sempra would suggest several modifications to the scenario analysis described below.

Allowance Allocation case. Sempra would suggest eliminating Energy 2020 attempt at modeling auction versus free allowance allocation in the electric sector given the problems cited above.

Full Offsets case. As reflected in the USCAP economic analysis offset availability is critical to moderating costs. Sempra would urge the ARB Staff to include a full U.S. offsets case. Allowing an unlimited use of offsets from throughout the United States would allow the ARB to see the impact of limitations on offsets on the California-only cap-and-trade program. Further, it would provide insight on the impact of a national cap-and-trade program on California since allowance trading with other states after the implementation of a federal cap-and-trade program would be the same as using offsets from the rest of the U.S. for similar activities prior to implementation of a national program.

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1 “Restrictions in the availability of offsets resulted in allowances prices that were 25-140% higher as compared to the core case.” Section 5, page 13, Key Findings from the Economic Analysis of the USCAP Blueprint for Legislative Action
Complementary Policy Cost Cases. Sempra would encourage the ARB to consider an additional scenario regarding the costs of the complementary policies. For example, an analysis assuming the costs of the complementary policies are some percent higher than forecast. This type of scenario would not affect the cap-and-trade program results, but would provide some insight into the costs of AB 32 as a whole if the complementary policies have no cost containment provisions. Sempra also suggests that a scenario with only cap and trade and none of the complementary measures would be useful in gauging the cost effectiveness of the complementary measures. Calculating the percentage of GHG reductions that would be achieved as economic choices in a cap-and-trade program as a percent of the overall expected complementary policy GHG reductions would be an instructive exercise.

Sempra applauds Staff’s efforts to better understand the economic efficiency opportunities within the Scoping Plan. As discussed at the workshop, including the sensitivity analysis and consideration of compliance pathways is critical for defining the marginal abatement curves for cap and trade and complementary measures. Sempra encourages Staff to publish these details in a timely manner.

Thank you for the opportunity to comment.

Yours sincerely,

[Signature]

c: Dr. Christopher Knittel, EAAC Economic Impacts Subcommittee

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2 The various scenarios suggest that transportation efficiency and reduction in vehicle miles traveled (VMT) are low cost since eliminating them has virtually no impact on cap-and-trade prices, suggesting that they would be economic choices in a cap-and-trade program. This is in contrast to scenarios where various efficiencies in the electricity sector are reduced with a result of much higher allowance prices. The latter suggests these measures are high cost.