CEC Full Fuel Cycle Assessment Report Docket #06-AFP-1 Comments of Catherine Dunwoody Executive Director, California Fuel Cell Partnership



June 27, 2007

This is a very comprehensive and complex report, and I'd like to recognize the tremendous efforts of the CEC staff and consultants. My comments revolve primarily around issues of consistency in this final report between the tables and charts and the text of the document. As I only had a few days to review the report, and didn't have access to the more detailed well to tank and tank to wheels reports, the CaFCP was unable to do a detailed review nor were we able to develop consensus comments as an organization. Therefore you can consider these comments to be my own, as an individual.

- The conclusion on p. 17 states that hydrogen produced from natural gas using steam reforming provides a 45 percent reduction in GHG emissions compared to gasoline. The tables and charts, however, as well as the summary on p. 49, indicate a approximate 55% reduction.
- 2. The conclusion on p 17 (corrected as reference above) should clarify that this conclusion applies to hydrogen used in a fuel cell vehicle. Hydrogen used in an internal combustion engine vehicle would not provide comparable benefits.
- 3. Figure 3.30 on p. 46 shows that the WTW energy use of hydrogen from grid electrolysis in a FCV is approximately equal to energy use of gasoline vehicles. However, the summary in Table 3-19 on p. 49 states there is a 13% increase in energy use for a FCV using hydrogen from grid electrolysis.
- 4. The WTW energy use for fuel cell buses is inconsistent with recent reports showing the fuel economy of hybrid FCBs operate by SunLine Transit and AC Transit is at least twice the fuel economy of diesel buses. See the NREL report at <u>http://www1.eere.energy.gov/hydrogenandfuelcells/tech\_validation/pdfs/41001.p</u> df

5. Conclusion #5 on p. 74 also applies to FCVs. By modifying this conclusion, CEC can highlight the similarities and common benefits of all electric drive technologies, and make the point that electric drive vehicles, whether powered by batteries or fuel cells, can significantly reduce energy use and emissions.

Finally, I'd like to comment that while I recognize the Herculean effort that the CEC staff and consultants have undertaken and the manner in which this project has expanded in scope and importance due to policy initiatives that have arisen just this year (e.g. LCFS), I'd like to suggest that the CEC provide more transparency regarding proposals under consideration and better public notice and opportunity to review draft and proposed reports in advance of meetings and workshops.

Thank you for the opportunity to comment.